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Seasonal Description of Winds and Surface and Bottom Salinities and Temperatures in the Northern Gulf of Mexico, October 1972 to January 1976

Perry A. Thompson, Jr. and Thomas D. Leming

February 1978

U.S. DEPARTMENT OF COMMERCE
Juanita M. Kreps, Secretary
National Oceanic and Atmospheric Administration
Richard A. Frank, Administrator
National Marine Fisheries Service

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Seasonal Description of Winds and Surface and Bottom Salinities and Temperatures in the Northern Gulf of Mexico, October 1972 to January 1976[1]

PERRY A. THOMPSON, JR.[2] and THOMAS D. LEMING[3]

ABSTRACT

Seasonal surface and bottom salinities and temperatures in the northern Gulf of Mexico are described. The area surveyed, from October 1972 to January 1976, was between Mobile Bay, Ala. (long. 88°00′W), and Atchafalaya Bay, La. (long. 91°30′W), from 5 to 50 fathoms (9 to 91 m).

INTRODUCTION

Published hydrographic data from the Gulf of Mexico erally deal with the central gulf rather than the conntal shelf. Rivas (1968), Drennan (1968), and Wiseman et al. (1976) studied surface temperature in the central gulf, subsurface circulation over the shelf, and cts of the Mississippi River discharge on temperature salinity of the inner shelf west of the Mississippi River. Many studies have been completed on temperature and salinity observations and seasonal trends he shelf of the northern Gulf of Mexico. The most ret study for the northwestern Gulf of Mexico is that of Temple et al. (1977) and for the northeastern that of Christmas et al.[4]

ecause the northern shelf of the Gulf of Mexico is the richest fish producing area in the gulf, considerable effort should be directed toward understanding the hygraphy and its effects on the environment of marine . In 1972 the National Marine Fisheries Service started a program to evaluate the industrial and foodfish demersal fishery in the northern Gulf of Mexico and rovide associated environmental information for the a. Environmental variables recorded during groundfish cruises were temperature, salinity, and bottom type. These variables can be correlated with densities of fin- later to determine their influence on abundance and tribution of the finfish stocks.

In this paper we give a brief description of surface and tom temperatures and salinities and establish their eral seasonal variability in the northern gulf. Temperature appears to be an important factor in the movement of juvenile groundfish from the estuaries (Franks et al. 1972). Determination of seasonality would be beneficial in understanding this aspect of the life history of groundfish in the northern Gulf of Mexico.

SURVEY AREA

Initially the primary fishing grounds encompassed the area from 5 to 50 fathoms (9 to 91 m) between Perdido Bay, Fla. (long. 87°30′W), and Ship Shoal, La. (long. 91°30′W) (Roithmayr 1965). This area was later reduced to between Mobile Bay, Ala. (long. 88°00′W), and Ship Shoal, La. (long. 91°30′W), because of the low density of groundfish east of Mobile Bay (Gutherz et al. 1975). The primary area was divided into three survey segments (Fig. 1): 1) east of the Delta, SA1 (long. 88°00′ to 89°00′W); 2) off the Delta, SA2 (long. 89°00′ to 90°00′W); and 3) west of the Delta, SA3 (long. 90°00′ to 91°30′W).

METHODS AND PROCEDURES

For each cruise, 35 to 45 hydrographic stations were selected both east and west of the mouth of the Mississippi River. These stations were preselected from fishing stations along transect lines at 20′ longitude intervals. If no fishing stations were located along a transect line, then the closest fishing stations to the transect were selected. Hydrographic stations were separated by 10 to 15 km along the transect line. Because of the random selection of fishing stations, the probability of repeating the same hydrographic station for each cruise was low. Stations were located by loran-A or radar.

Equipment used to acquire data on the various cruises is listed in Table 1. All equipment was calibrated at the beginning of each cruise. Temperatures were measured with an expendable bathythermograph (XBT) and recorded to the nearest 0.1°C on cruises 40 to 52. Salinity data were not taken during cruises 40 to 48. On cruise 52 surface and bottom salinities were recorded to the nearest part per thousand (ppt) using a Goldbert T/C refractometer. On cruises 55 to 64, salinity and tem-

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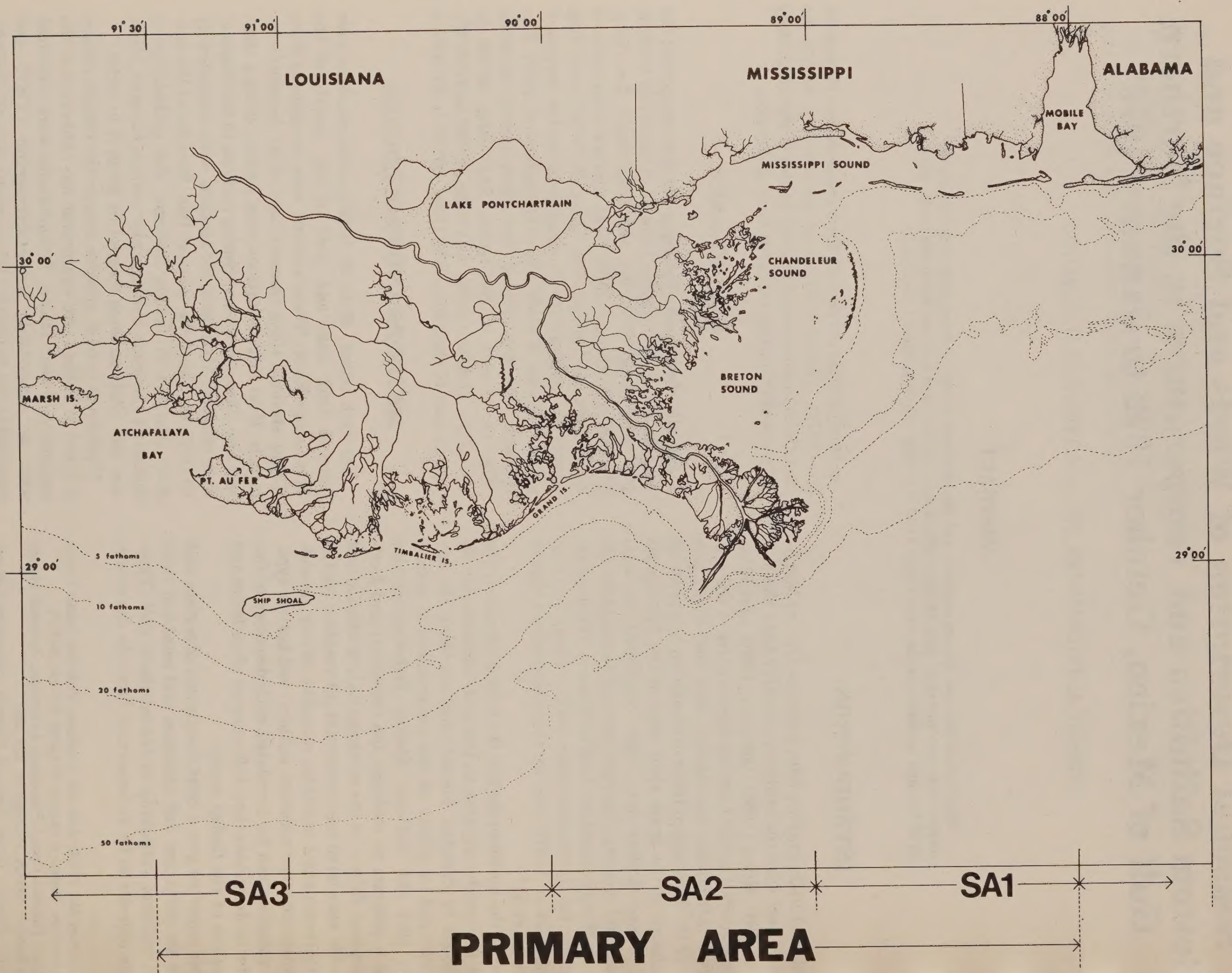
[1] ontribution No. 77-24P from the Southeast Fisheries Center Pasca- a Laboratory, National Marine Fisheries Service, NOAA.

[2] Southeast Fisheries Center Pascagoula Laboratory, National Marine Fisheries Service, NOAA, Pascagoula, MS 39567.

[3] Southeast Fisheries Center National Fisheries Engineering Labora- , National Marine Fisheries Service, NOAA, NSTL, Bay St. Louis, 39520.

[4] Christmas, J. Y., A. Perry, and R. S. Waller. 1974. Investigations of coastal pelagic fishes completion report. Gulf Coast Research Labora- Ocean Springs, Miss., 90 p.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LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
5 fathoms
10 fathoms
20 fathoms
50 fathoms
SA3
SA2
SA1
PRIMARY AREA

Table 1.—Data and hydrographic equipment used on the FRS *Oregon II* groundfish cruises.

Cruise no.	Date	Hydrographic equipment XBT	STD	Niskin bottles	Refractometer	Salinity Surface	Bottom	Temperature Surface	Bottom
40	Oct. 1972	X						X	X
42	Nov. 1972	X						X	X
44	Apr. 1973	X						X	X
48	Nov. 1973	X						X	X
51	June 1974	X			X			X	X
52	Aug. 1974	X		X	X	X	X	X	X
55	Nov. 1974		X		X	X	X	X	X
57	Mar. 1975		X		X	X	X	X	X
60	July 1975		X		X	X	X	X	X
62	Nov. 1975		X		X	X	X	X	X
64	Jan. 1976		X		X	X	X	X	X

perature were recorded using a Plessey Environmental System Model No. 9060 Graphic, self-recorded, STD . The degree of variation between the STD and the ctometer was 0.5 ppt. Because the XBT failed on cruise 44 and the STD on cruise 55, the environmental data are incomplete east of the Delta. Weather data were n from the FRS *Oregon II* weather log for cruises 48 to 4. The September and October wind roses for SA2 and SA3 are incomplete because of inadequate weather a for that time.

gures 2 to 43 show mean bimonthly differences between surface and bottom temperature and salinity, mean bimonthly air temperature, and surface and bot- isotherms and isohalines for each cruise. Isotherm ours were not drawn for cruise 40 (Fig. 9) because of the narrow range between data points. Isotherms and isohaline contours were not drawn around the mouth of Mississippi River (Figs. 9 to 37, 39, 42) because of the e range in values due to the influence of the Mississippi River.

DISCUSSION

eteorological conditions and the discharge from the sissippi River within this survey area have a significant effect on seasonal variations (Drennan 1968). Within the primary area, salinity and temperature data e been separated by depth and survey area to detect onal changes. Calculated bimonthly mean surface and bottom temperatures are shown in Table 2. Mean differences between surface and bottom temperatures e been computed bimonthly to demonstrate an annual seasonal cycle for each survey area (Figs. 2-4). Data indicated that both a summer and winter season are well defined within the primary area. The change in seasons cognized when surface and bottom temperatures are similar. The summer season begins in March and April at all depths. This change is correlated with changing eorological conditions as the wind shifts from a herly to a southerly direction (Figs. 2-4). This shift in direction is accompanied by a decrease in intensity of wind speed and an increase in air temperature (Fig. 5). er and air temperatures reach a peak in July and ust accompanied by frequent calm winds (Figs. 2-4). Little wind-mixing during the period, coupled with solar heating, results in a large difference between surface and bottom temperatures. The summer season begins to disappear in September and October with a drop in air temperature and a wind shift. By November and December the winter season has begun with southeasterly winds shifting to a more northerly direction (Figs. 2-4). This change in wind direction and intensity produces northers, causing the mean air temperature to drop approximately 9°C from the July and August high (Leipper 1954). The wind generally remains out of the north to northwest in January and February bringing colder temperatures within the survey area. This is the coldest period of the year. By March and April the winter season ends with a general warming of air temperature and a wind shift to the southeast, thus completing the annual cycle.

Table 2.—Mean bimonthly surface and bottom temperatures (°C) for each survey area. The top figure represents surface temperature and the bottom figure represents the bottom temperature.

Survey area	Jan.-Feb.	Mar.-Apr.	May-June	July-Aug.	Sept.-Oct.	Nov.-Dec.
			5 to 9 fathoms			
	13.5	17.7	25.7	28.9	28.7	21.9
SA1	14.6	18.1	22.7	25.2	28.3	22.8
	12.7	17.8	29.2	29.5	26.7	22.8
SA2	16.5	19.1	23.7	26.4	27.8	21.6
	12.9	19.6	27.0	29.6	27.7	20.7
SA3	16.4	19.6	26.1	27.1	27.6	21.5
			10 to 19 fathoms			
	15.3	18.1	25.6	27.9	28.7	25.2
SA1	17.4	19.2	21.7	23.9	26.2	22.9
	12.4	18.9	28.0	29.8	22.3	22.2
SA2	19.9	20.6	22.6	24.4	26.3	24.2
	14.3	19.9	25.7	29.4	28.0	22.2
SA3	18.4	20.2	23.8	24.8	27.8	23.2
			20 to 50 fathoms			
	18.6	18.6	27.1	28.7	28.6	23.6
SA1	19.5	20.4	21.7	21.2	22.1	23.7
	11.9	18.1	26.5	29.6	26.4	21.3
SA2	19.6	19.8	19.7	19.3	21.1	24.1
	17.9	20.4	26.9	29.7	28.0	22.1
SA3	19.2	20.3	20.3	20.3	22.6	22.9

The importance of the Loop Current and its role in the circulation pattern on the shelf has been described by Drennan (1968). Bottom salinities at all depths in the three survey areas are similar and relatively constant because of the influence of the Loop Current (Drennan 1968) (Figs. 6-8). Surface salinities vary within each survey area, indicating seasonal changes that can be attributed to the discharge from the Mississippi River and calm weather during the summer months (Drennan 1968). The Mississippi River flood period peaks in April and May with a 17-yr average of 3,668 m^3/s.[5] These flood periods are reflected in lower surface salinities for SA2 (Fig. 7) and to some extent in SA1 and SA3 for May and June (Figs. 6, 8).

ACKNOWLEDGMENTS

Our appreciation is extended to the Louisiana State University Department of Marine Science for the use of the Plessey STD unit and the assistance of Gene Turner and Bob Allen. Also, thanks are extended to Elmer J. Gutherz for his guidance, and to Tommy Strowd for drawing the isohalines and isotherms on the charts. Additional thanks are given to the scientific party and cr of the FRS *Oregon II*.

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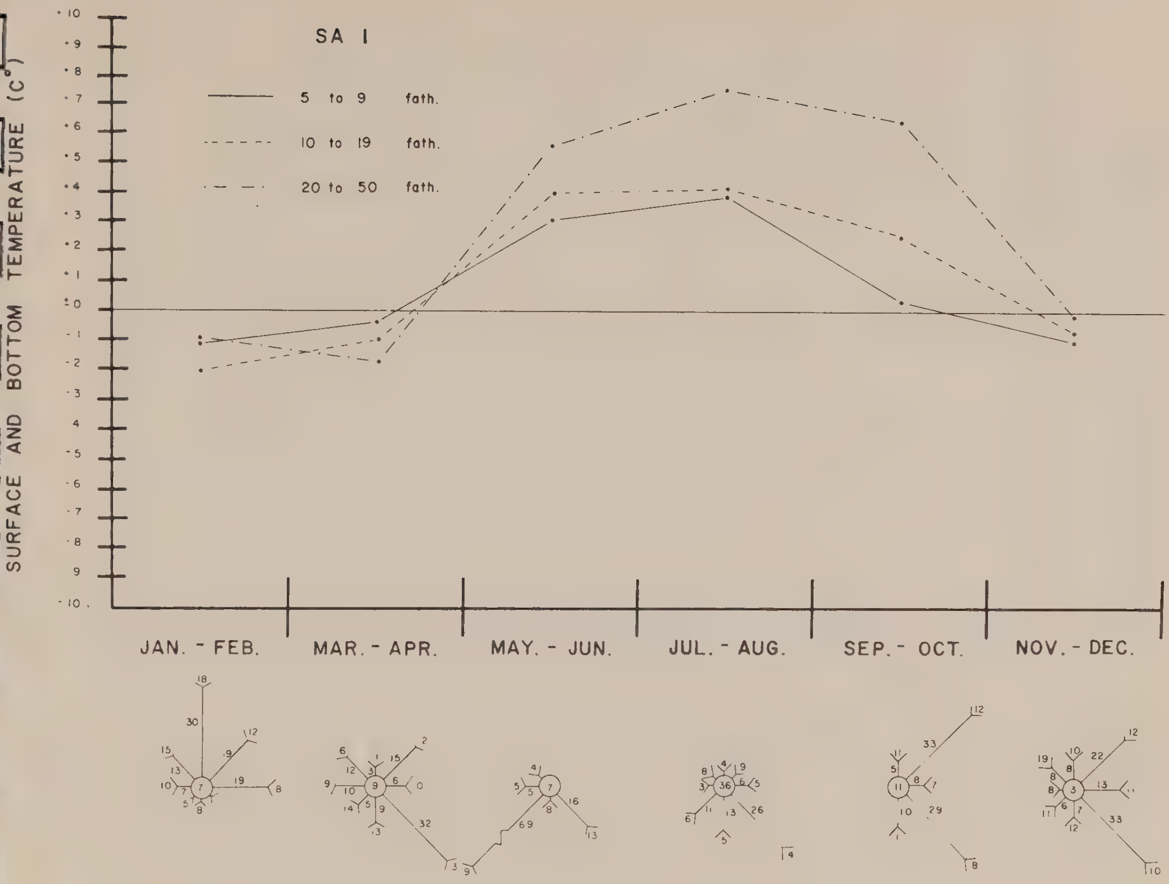


BIMONTHLY WIND VECTORS

igure 2.—Bimonthly mean difference between surface and bottom water temperatures and associated wind roses east of the Mississippi River elta (SA1). Wind roses: Arrows fly with the wind based on eight points of the compass. Each wind rose indicates the average wind speed at the f the arrow, percent frequency at center of arrow, and percentage of calm or light winds are encircled.

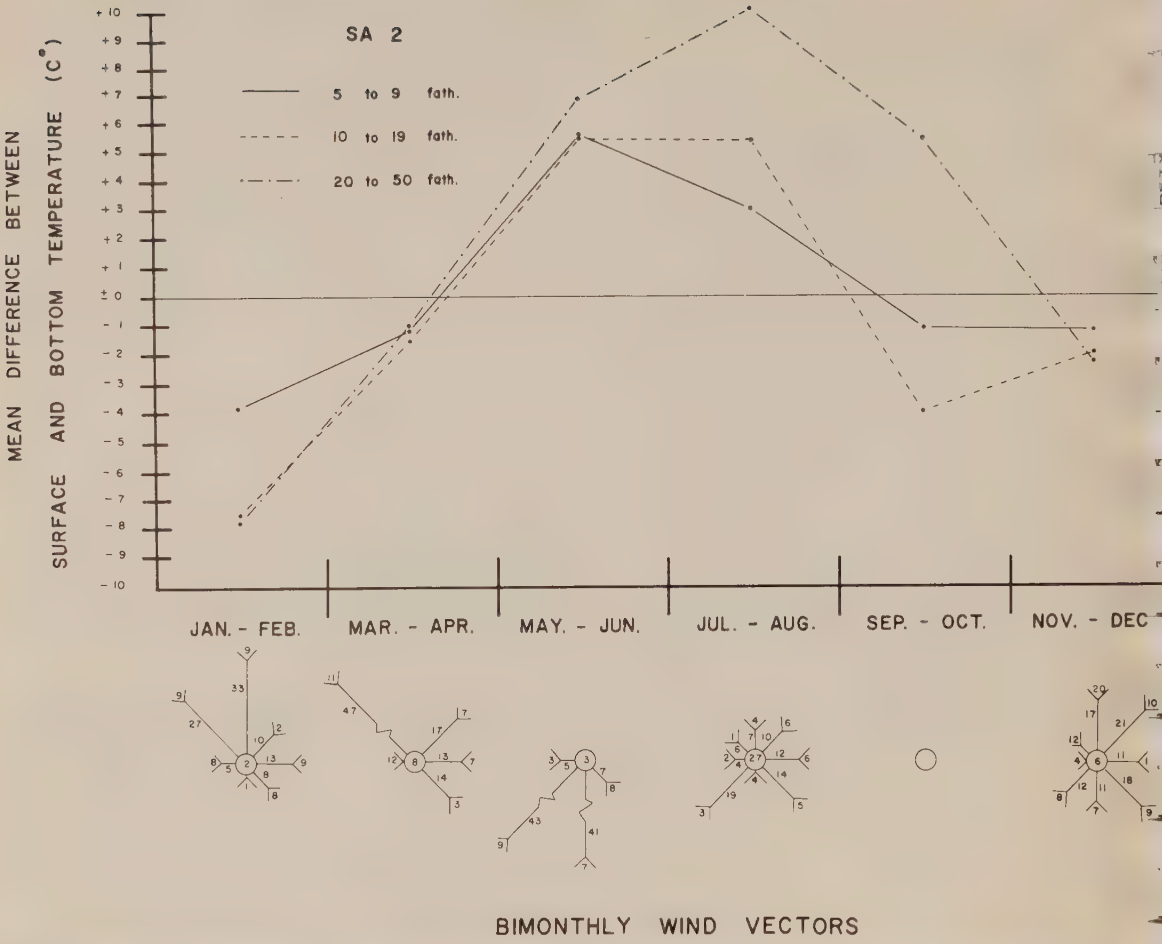
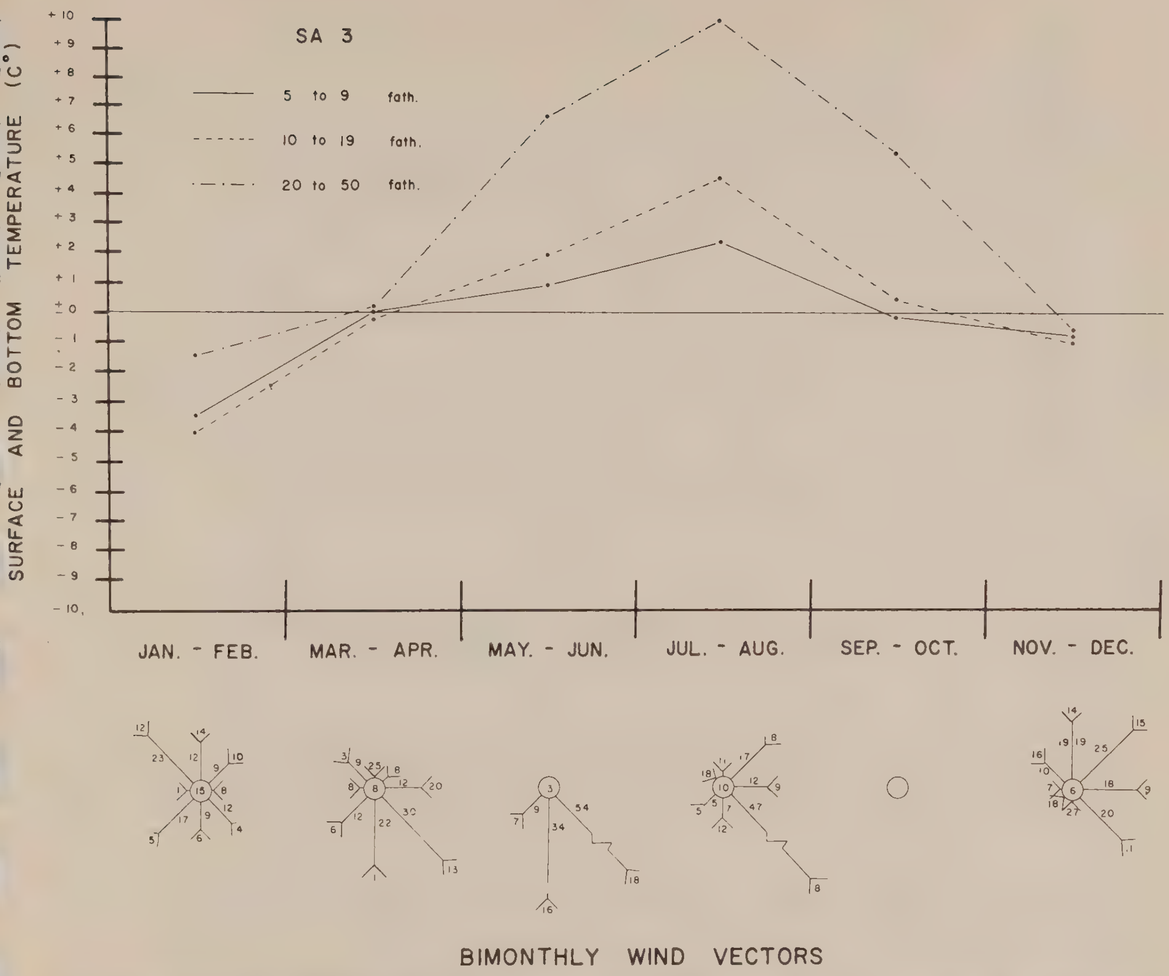


Figure 3.—Bimonthly mean difference between surface and bottom water temperatures and associated wind roses off the Mississippi R Delta (SA2). Wind roses: Arrows fly with the wind based on eight points of the compass. Each wind rose indicates the average wind speed at t end of the arrow, percent frequency at center of arrow, and percentage of calm or light winds are encircled.



igure 4.—Bimonthly mean difference between surface and bottom water temperatures and associated wind roses west of the Mississippi River elta (SA3). Wind roses: Arrows fly with the wind based on eight points of the compass. Each wind rose indicates the average wind speed at the of the arrow, percent frequency at center of arrow, and percentage of calm or light winds are encircled.

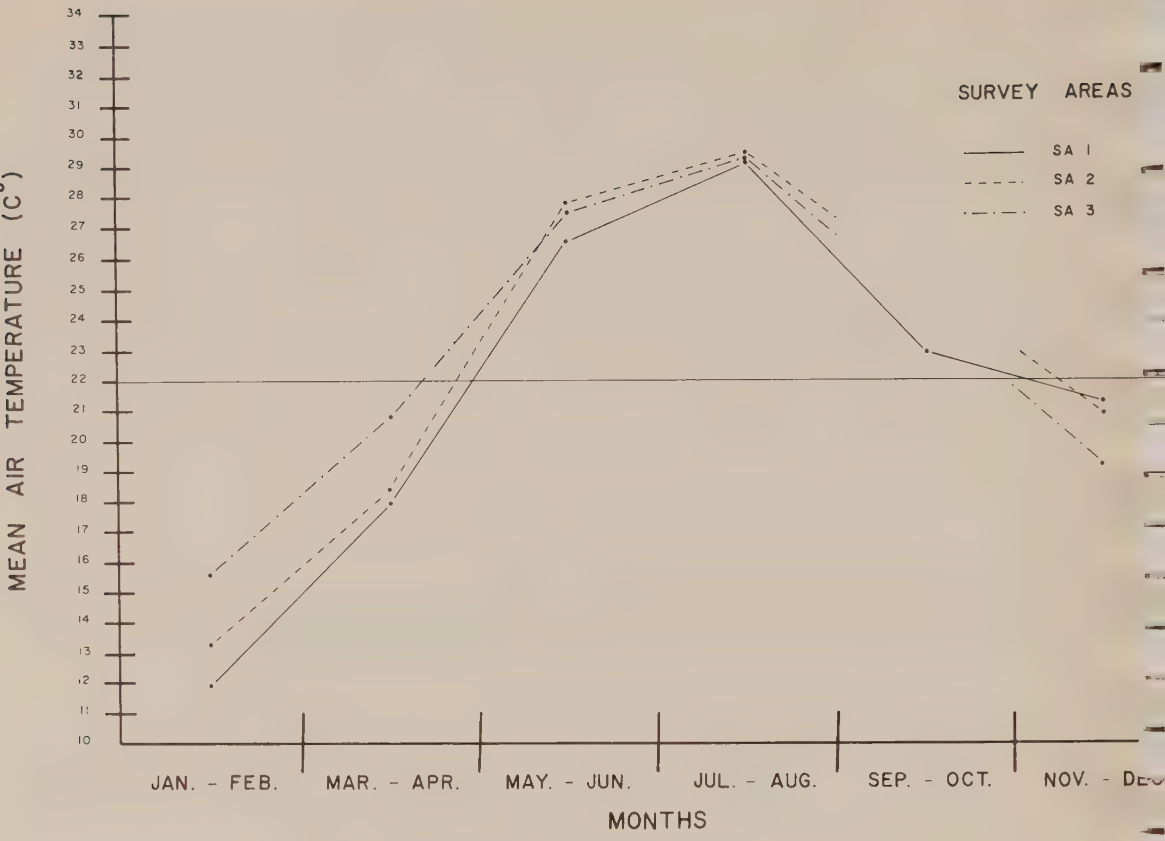


Figure 5.—Bimonthly mean air temperature for each survey area (SA1, 2 and 3).

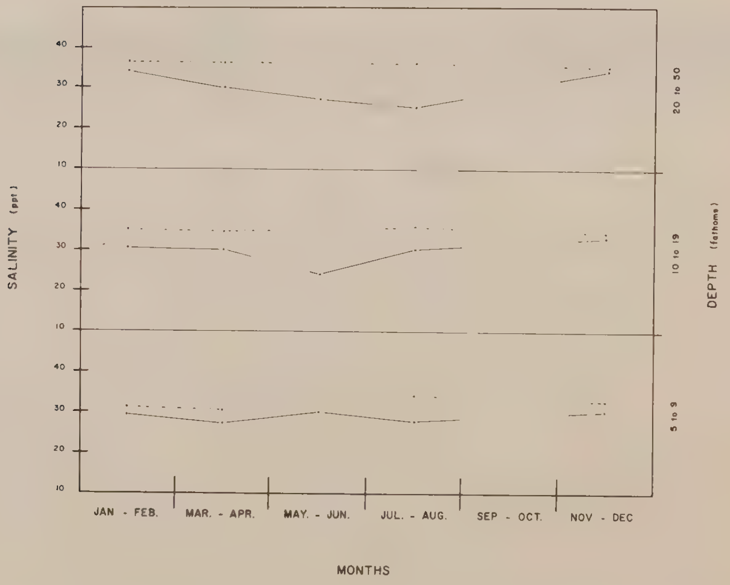


Figure 6.—Bimonthly mean surface and bottom salinity east of the Mississippi River Delta (SA1). Solid line is surface salinity; dash line is bottom salinity.

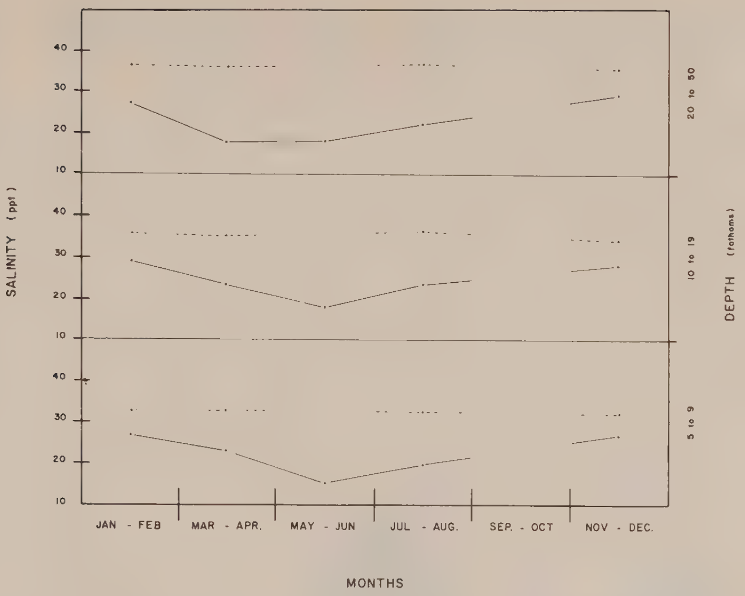


Figure 7.—Bimonthly mean surface and bottom salinity off the Mississippi River Delta (SA2). Solid line is surface salinity; dash line is bottom salinity.

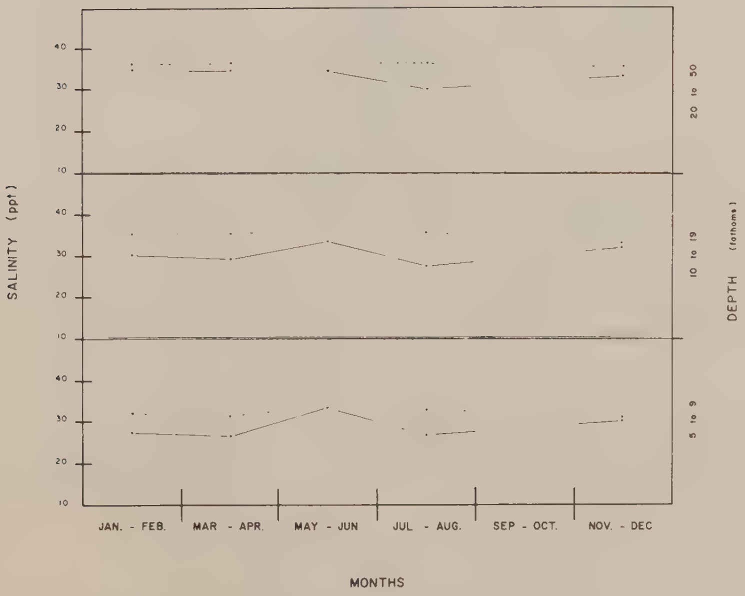
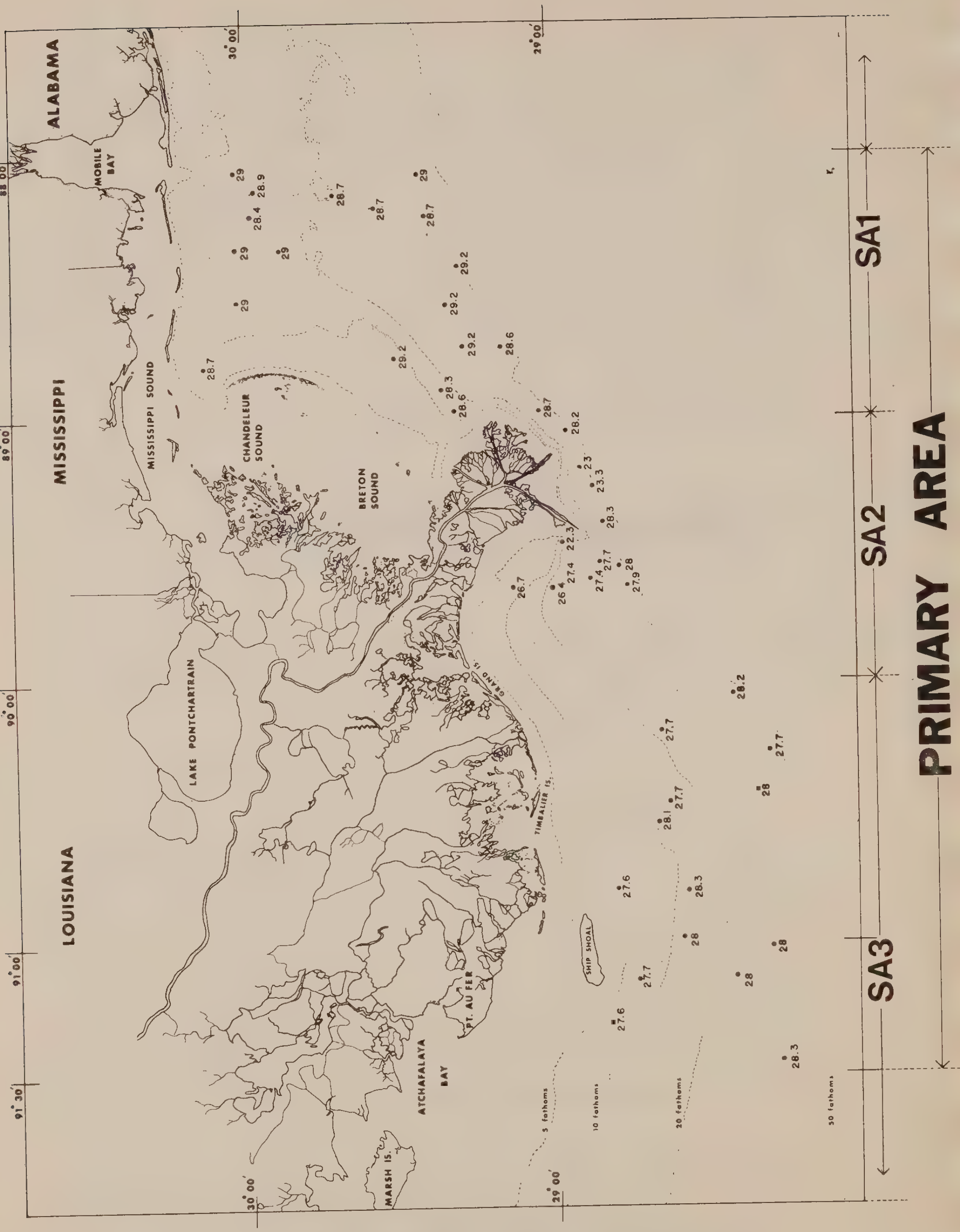


Figure 8.—Bimonthly mean surface and bottom salinity west of the Mississippi River Delta (SA3). Solid line is surface salinity; dash line is bottom salinity.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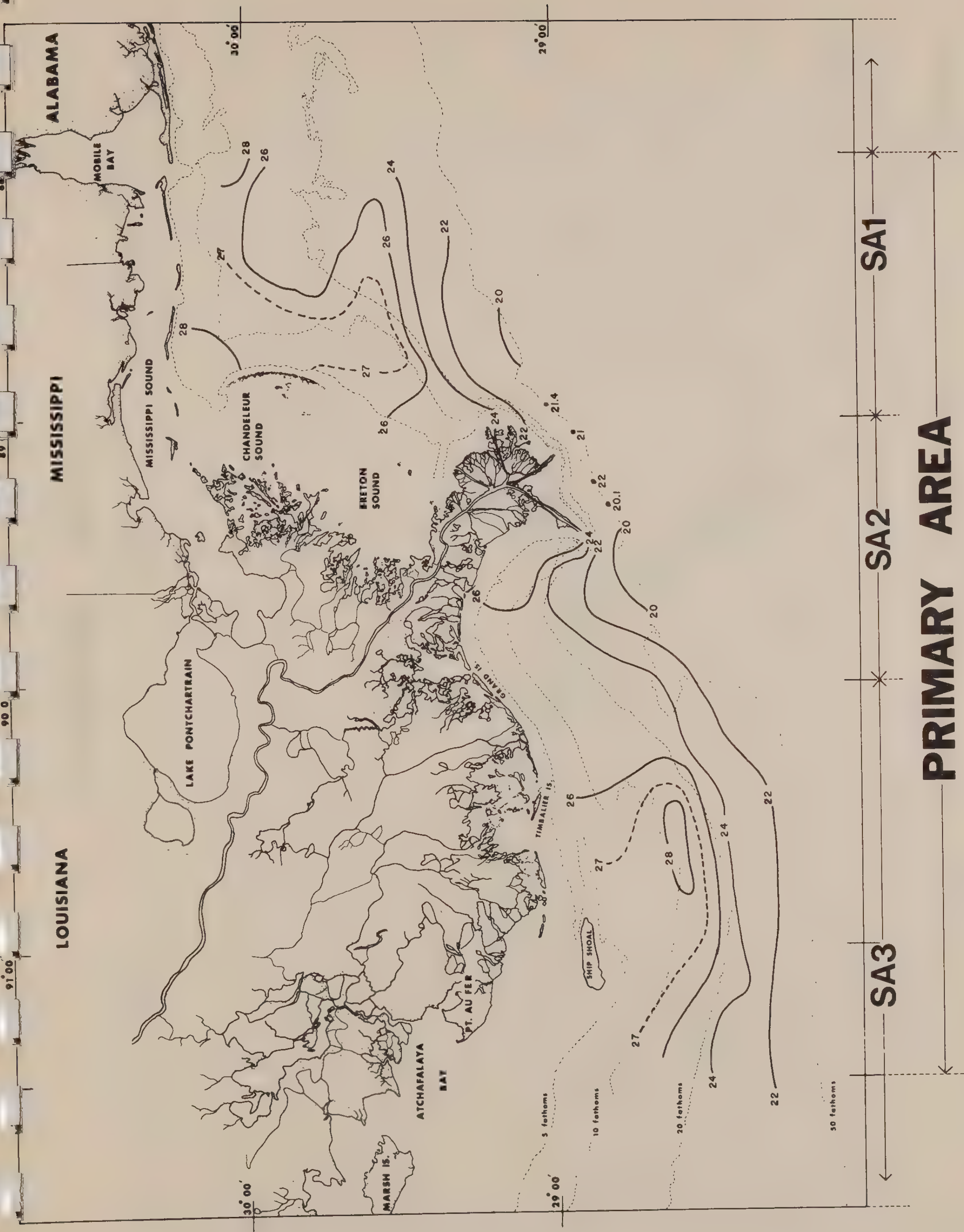

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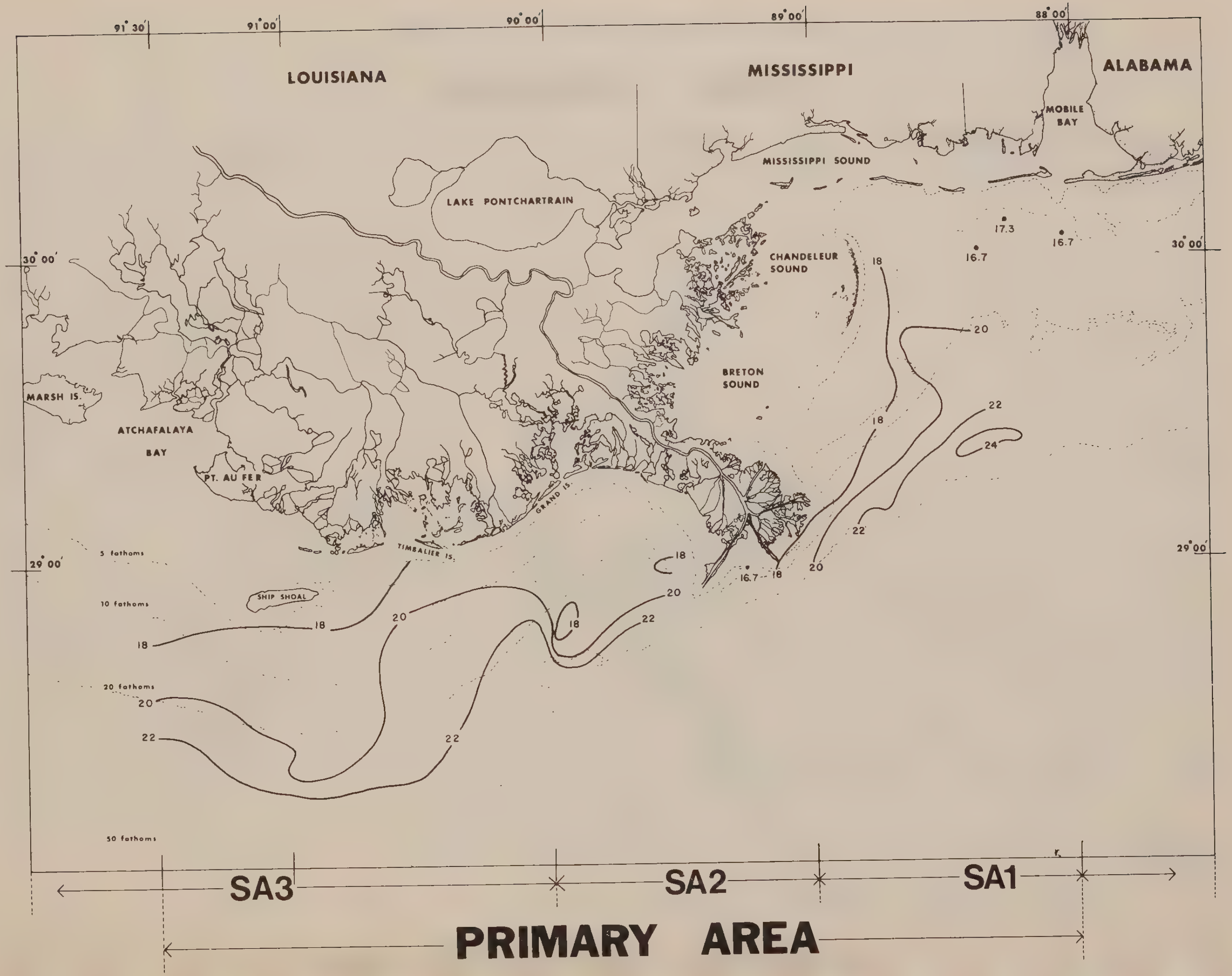
Figure 10.—Cruise 40, bottom temperature (°C), October 1972.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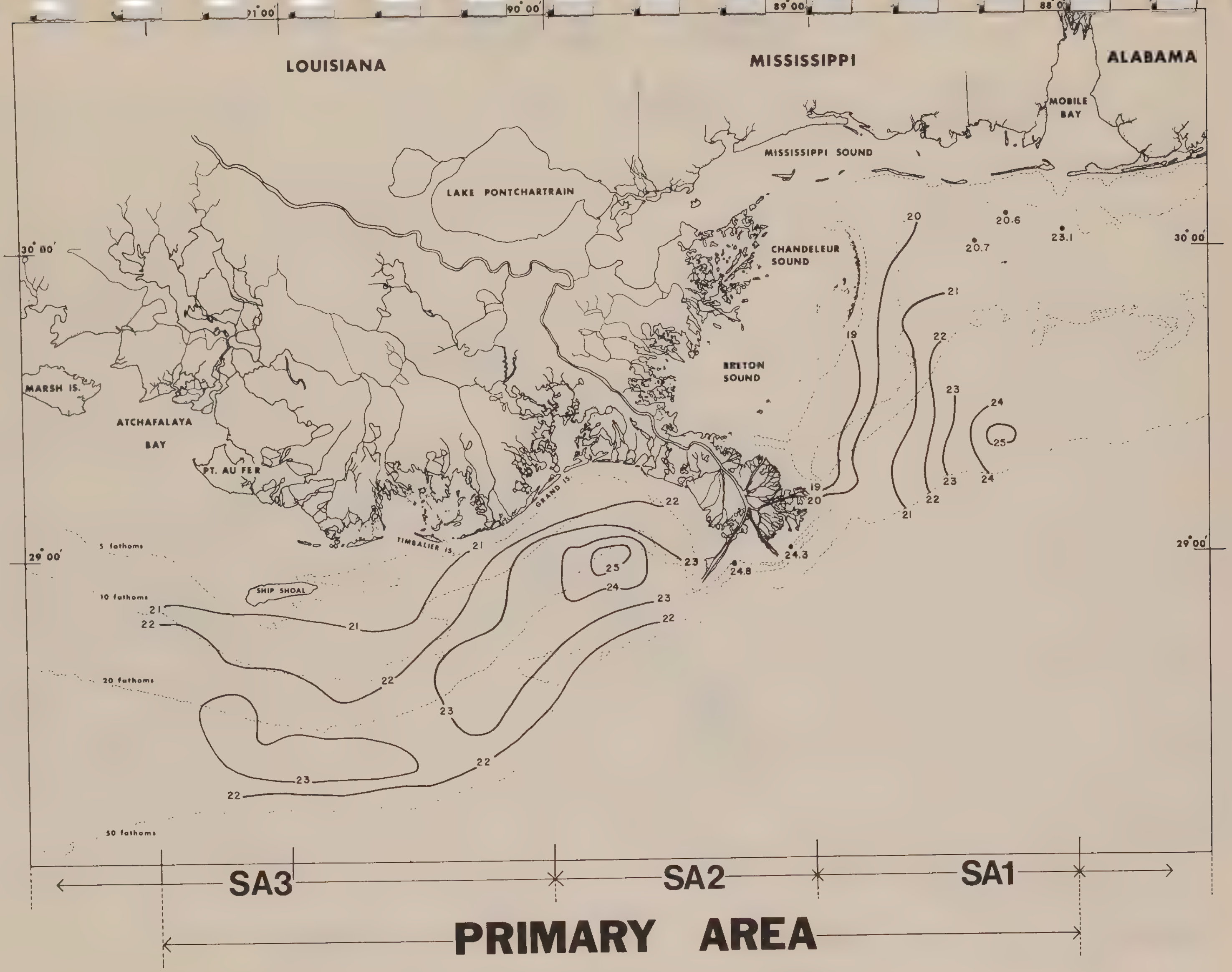
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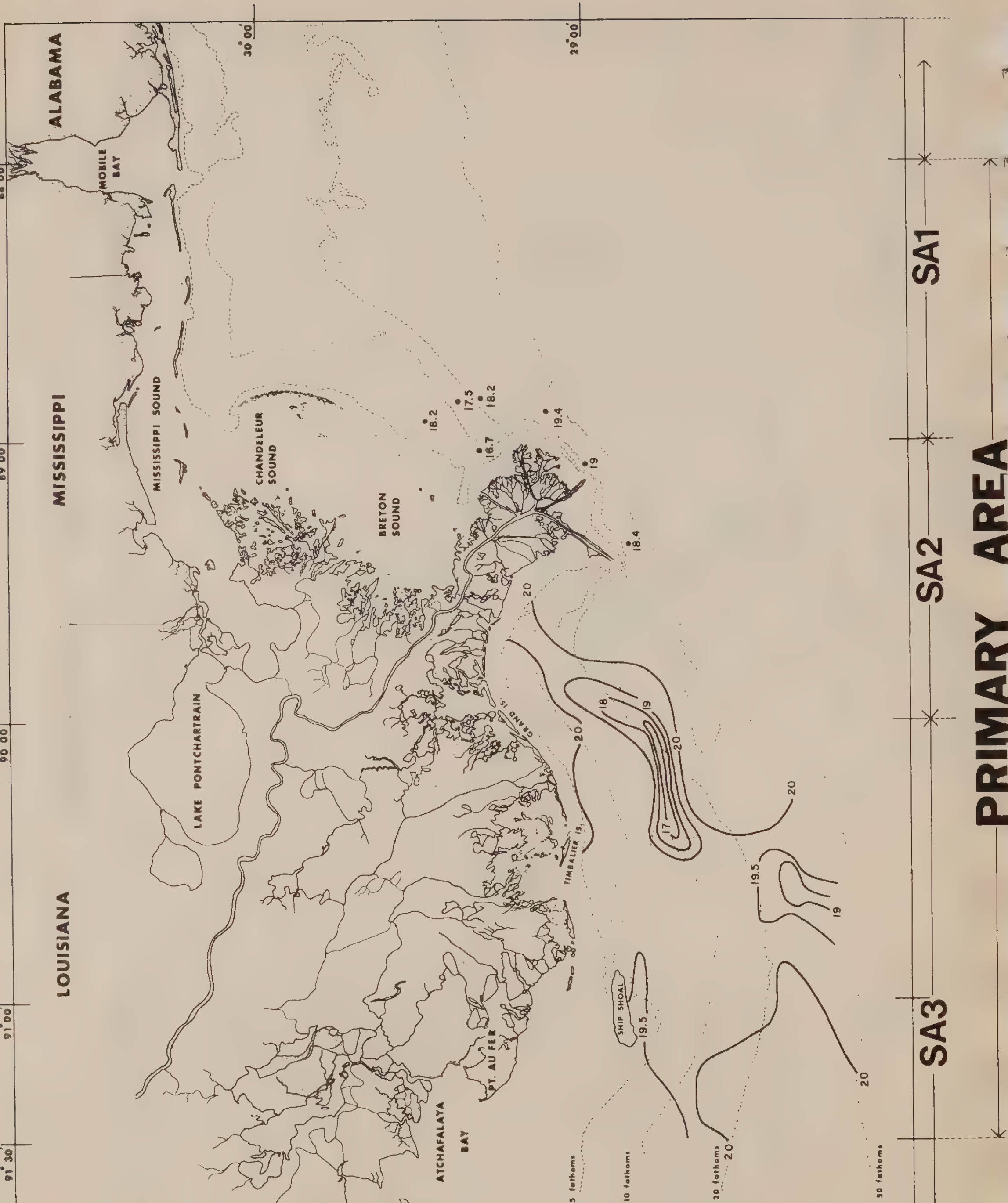
PRIMARY AREA

Figure 12.—Cruise 42, bottom temperature (°C), November 1972.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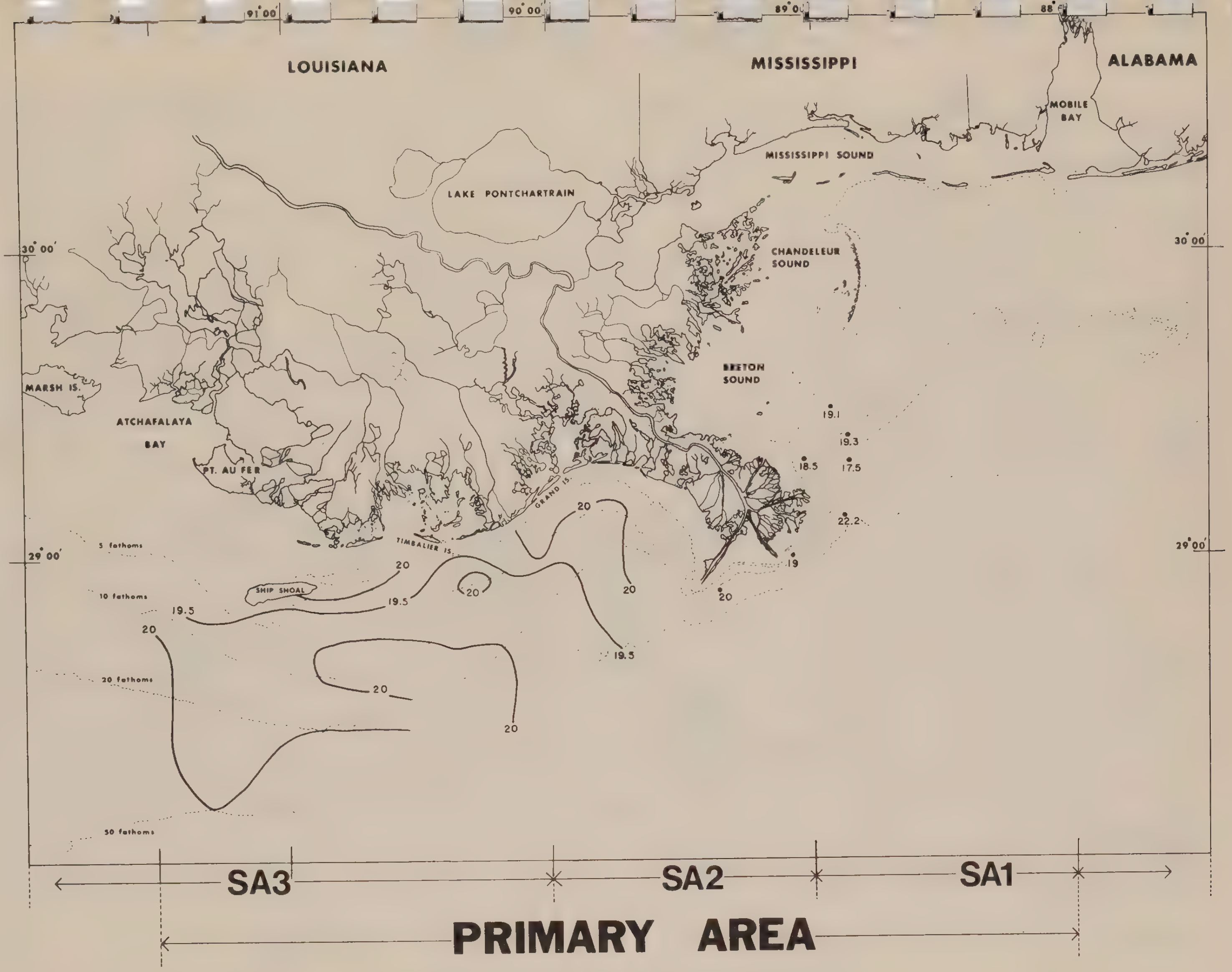
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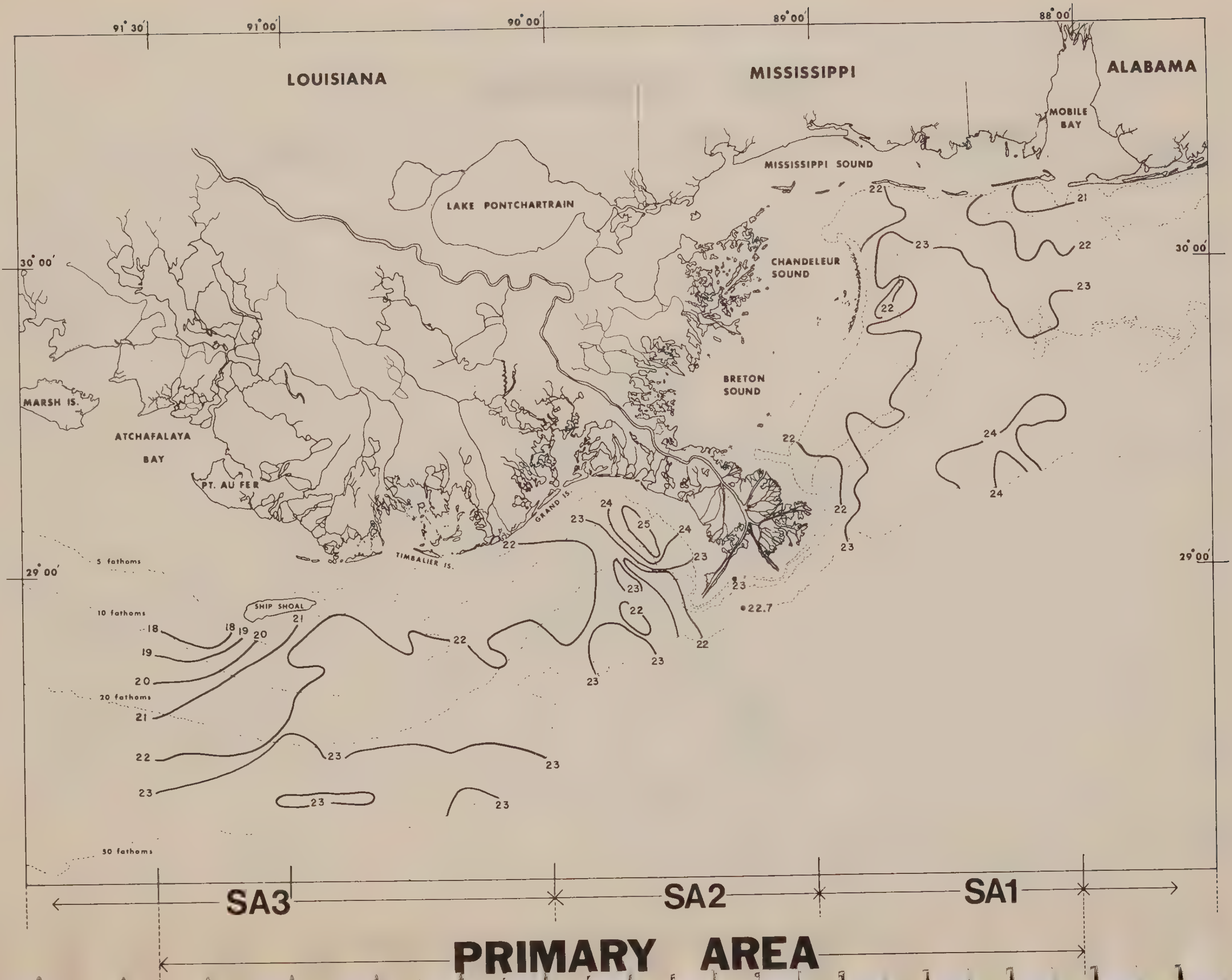
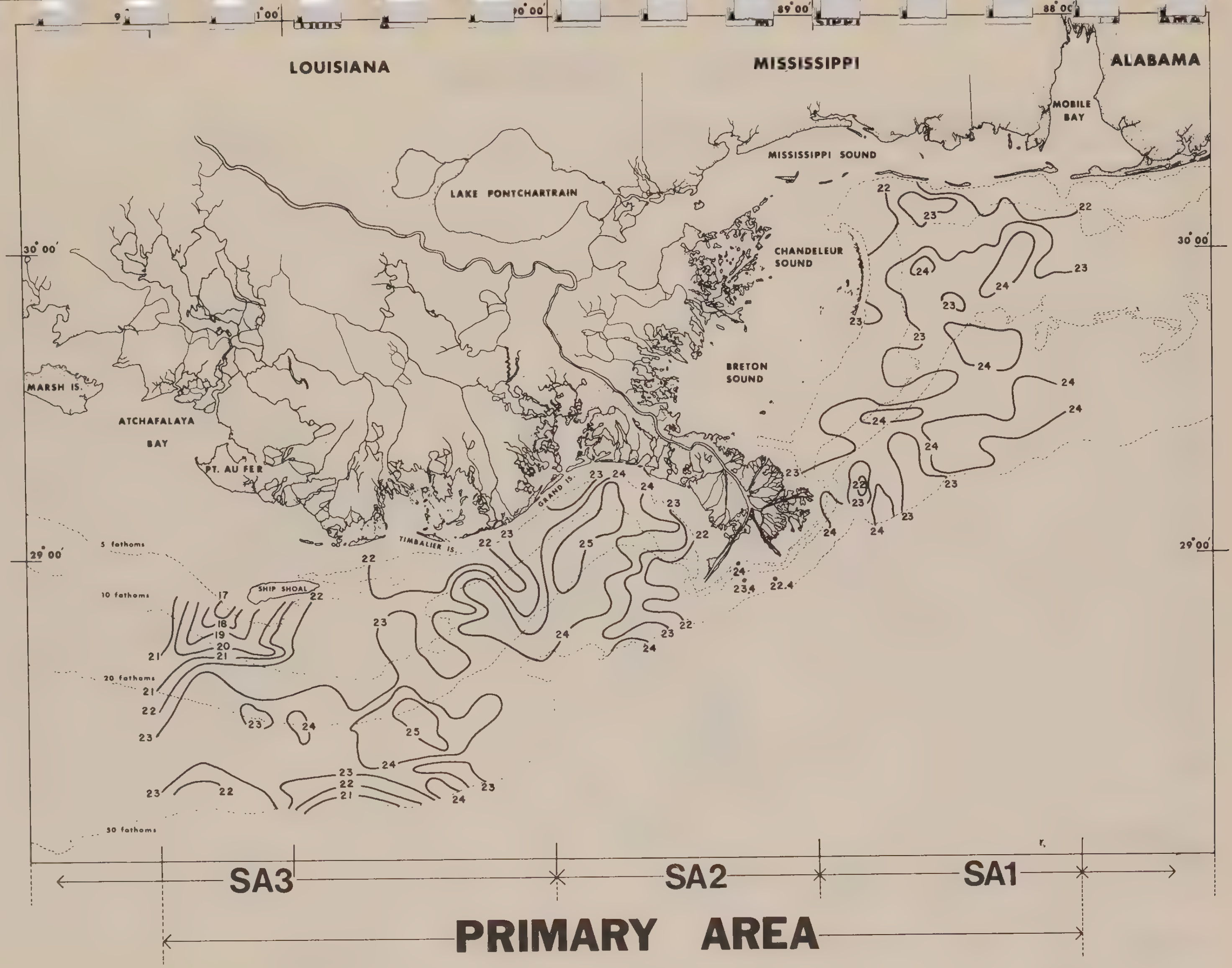
SA1
PRIMARY AREA

Figure 14.—Cruise 44, bottom temperature (°C), April 1973.


91° 30′
91° 00′
90° 00′
89° 00′
88° 00′
30° 00′
29° 00′
LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
5 fathoms
10 fathoms
20 fathoms
50 fathoms
18
19
20
21
22
23
24
25
22.7
SA3
SA2
SA1
PRIMARY AREA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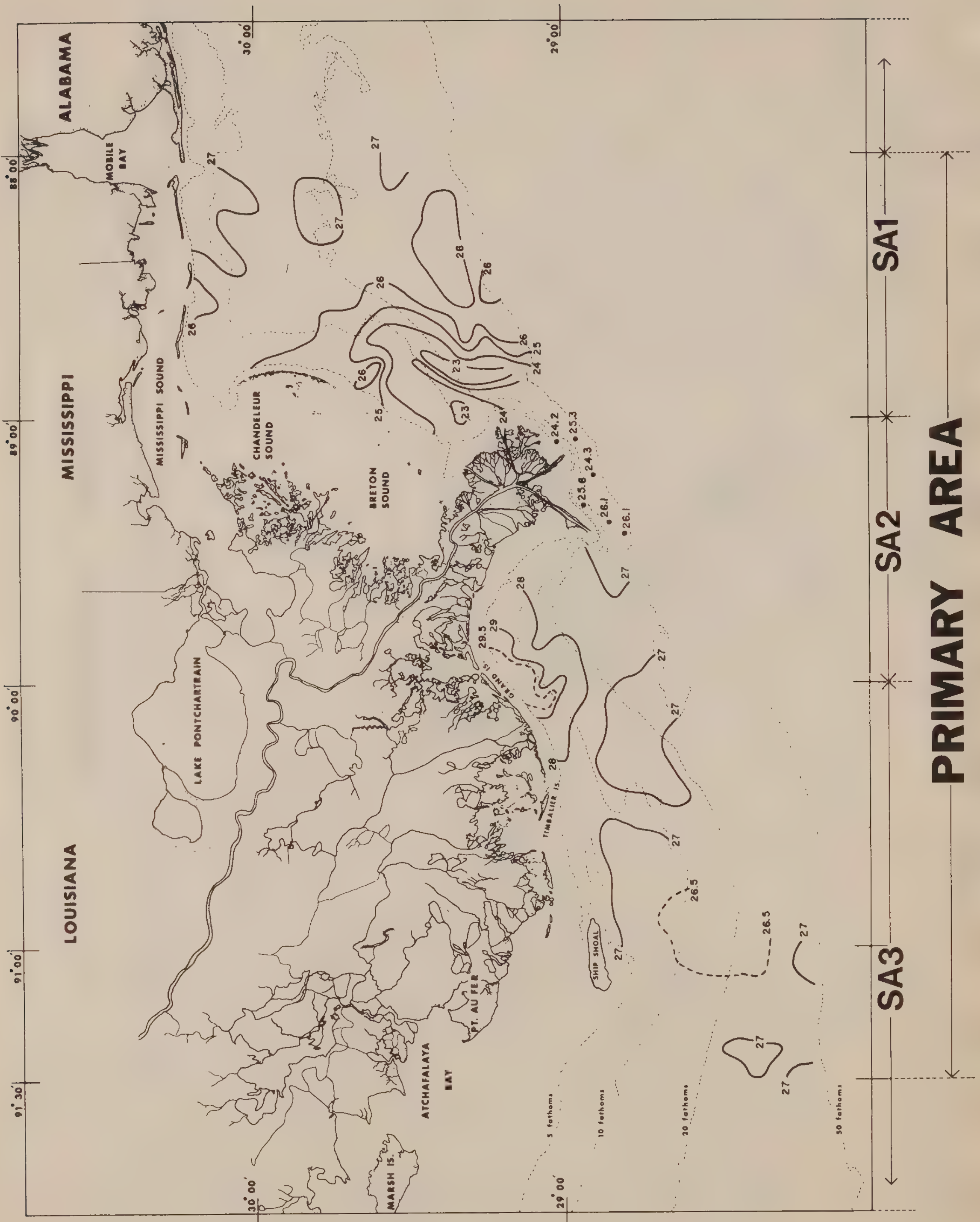
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
TIMBALIER IS.
GRAND IS.
SHIP SHOAL
5 fathoms
10 fathoms
20 fathoms
30 fathoms
30°00′
29°00′
91°00′
90°00′
89°00′
88°00′
SA3
SA2
SA1
PRIMARY AREA

Figure 16.—Cruise 48, bottom temperature (°C), November 1973.


ALABAMA
MISSISSIPPI
LOUISIANA
MOBILE BAY
MISSISSIPPI SOUND
CHANDELEUR SOUND
BRETON SOUND
LAKE PONTCHARTRAIN
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
PT. AU FER
ATCHAFALAYA BAY
MARSH IS.
88°00'
89°00'
90°00'
91°00'
91°30'
30°00'
29°00'
5 fathoms
10 fathoms
20 fathoms
50 fathoms
27
28
26
25
24
23
24.2
25.3
24.3
25.8
26.1
29.5
29
26.5
SA1
SA2
SA3
PRIMARY AREA

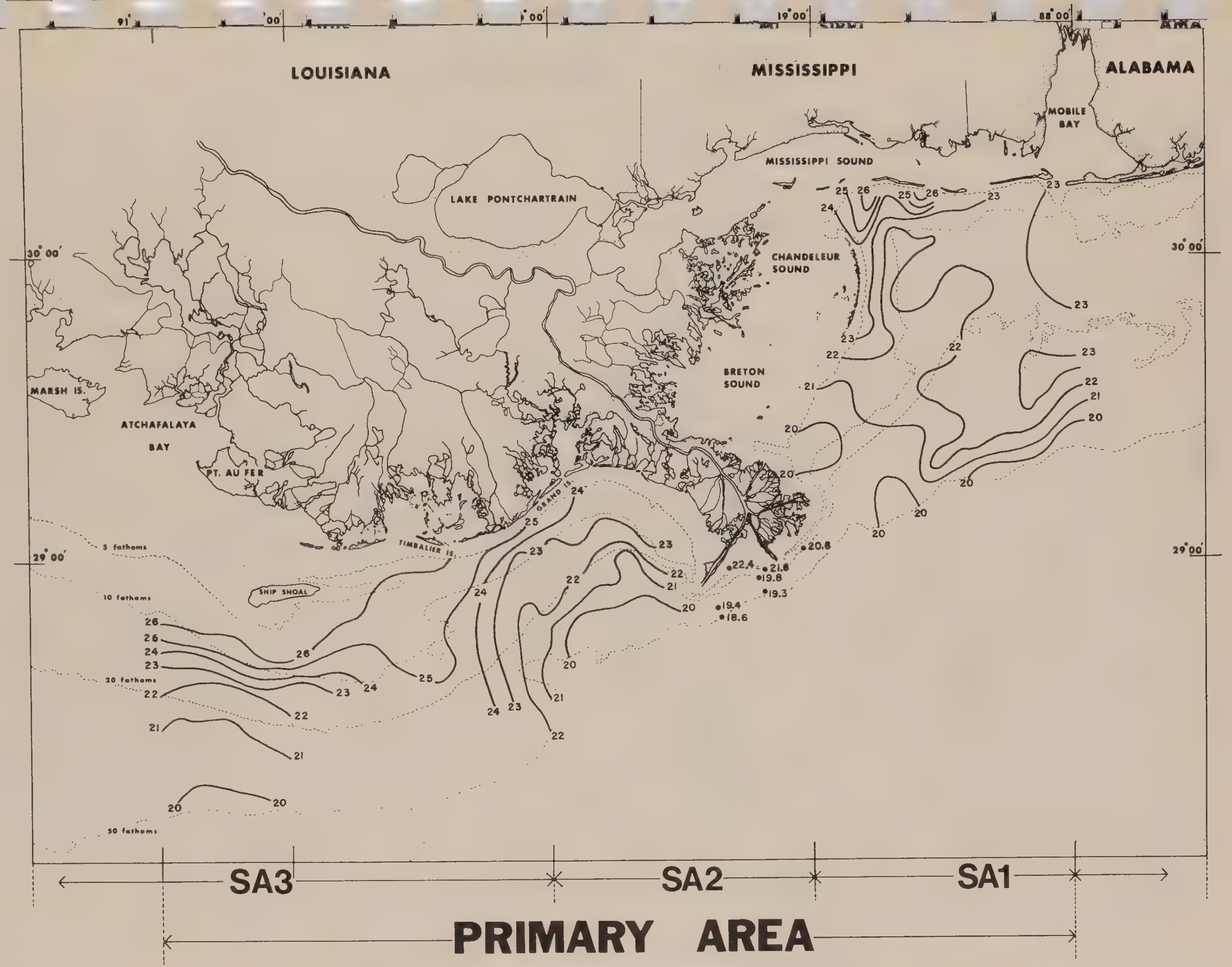
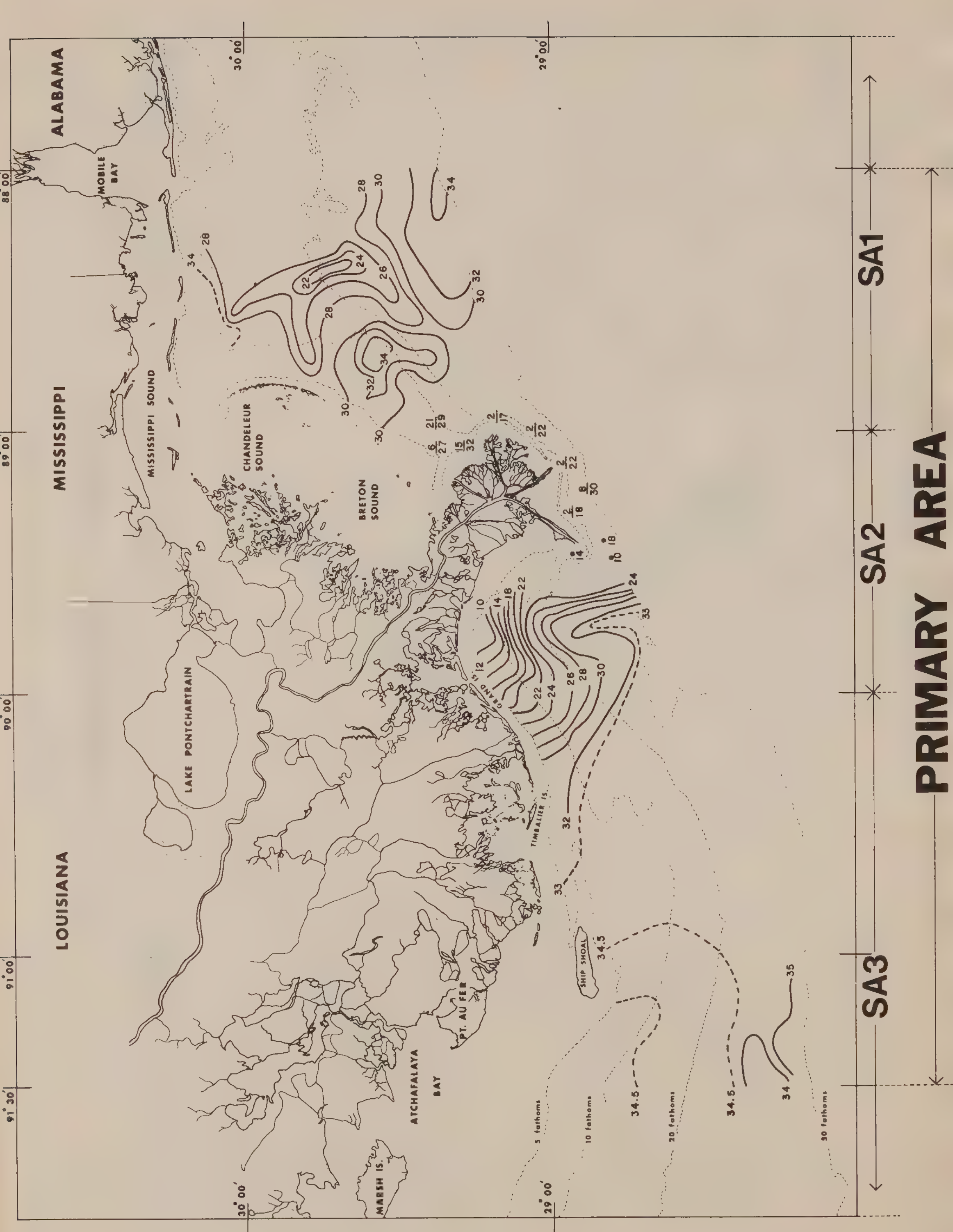

91°
90°00′
89°00′
88°00′
LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
TIMBALIER IS.
GRAND IS.
SHIP SHOAL
30°00′
29°00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
20.8
22.4
21.8
19.8
19.3
19.4
18.6
SA3
SA2
SA1
PRIMARY AREA

Figure 18.—Cruise 51, bottom temperature (°C), June 1974.


ALABAMA
MOBILE BAY
MISSISSIPPI
MISSISSIPPI SOUND
CHANDELEUR SOUND
BRETON SOUND
LOUISIANA
LAKE PONTCHARTRAIN
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
PT. AU FER
ATCHAFALAYA BAY
MARSH IS.
30°00'
29°00'
88°00'
89°00'
90°00'
91°00'
91°30'
5 fathoms
10 fathoms
20 fathoms
50 fathoms
22
24
26
28
30
32
34
21/29
6/27
15/32
2/17
2/22
8/30
2/18
14
10
18
12
33
34.5
35
SA1
SA2
SA3
PRIMARY AREA

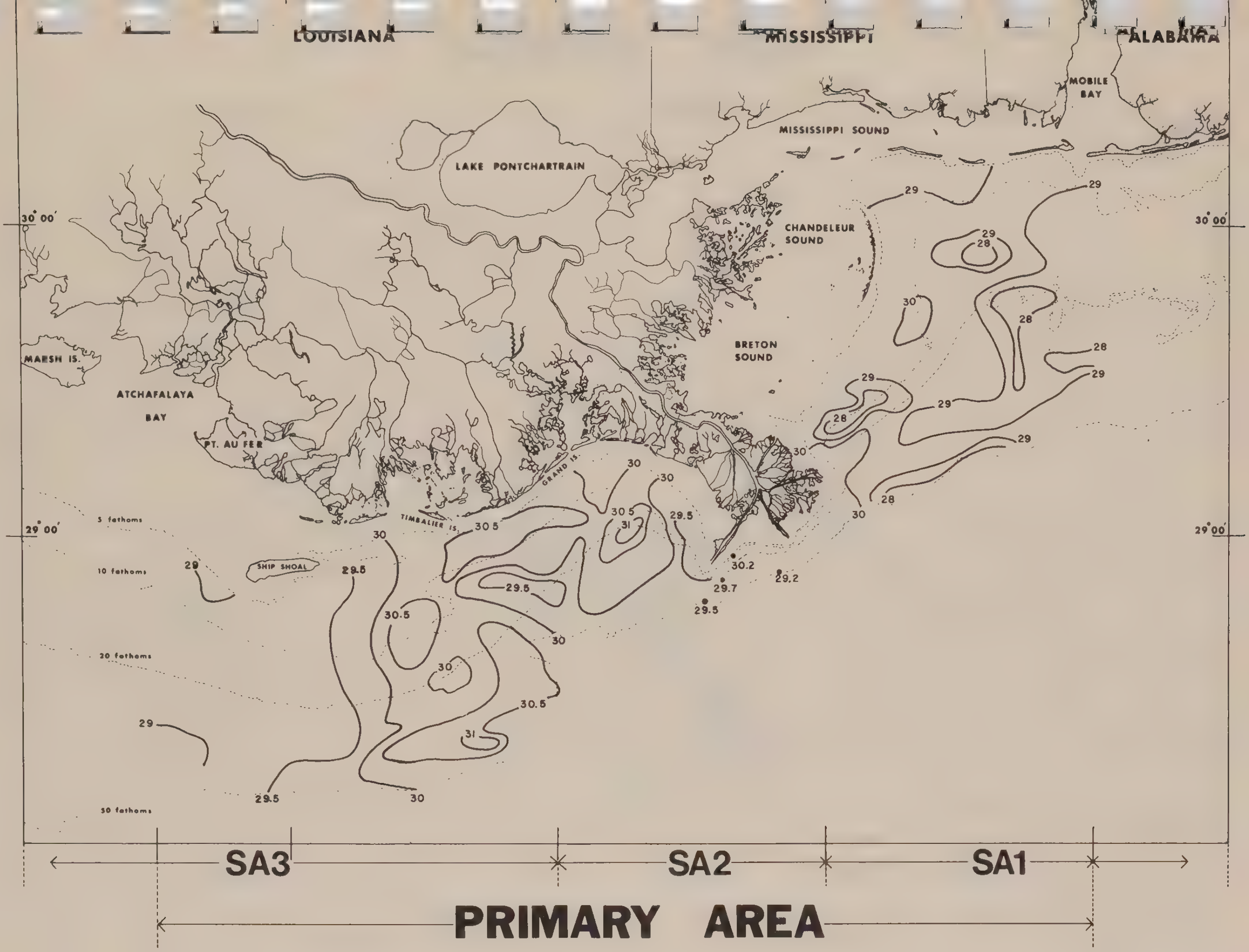
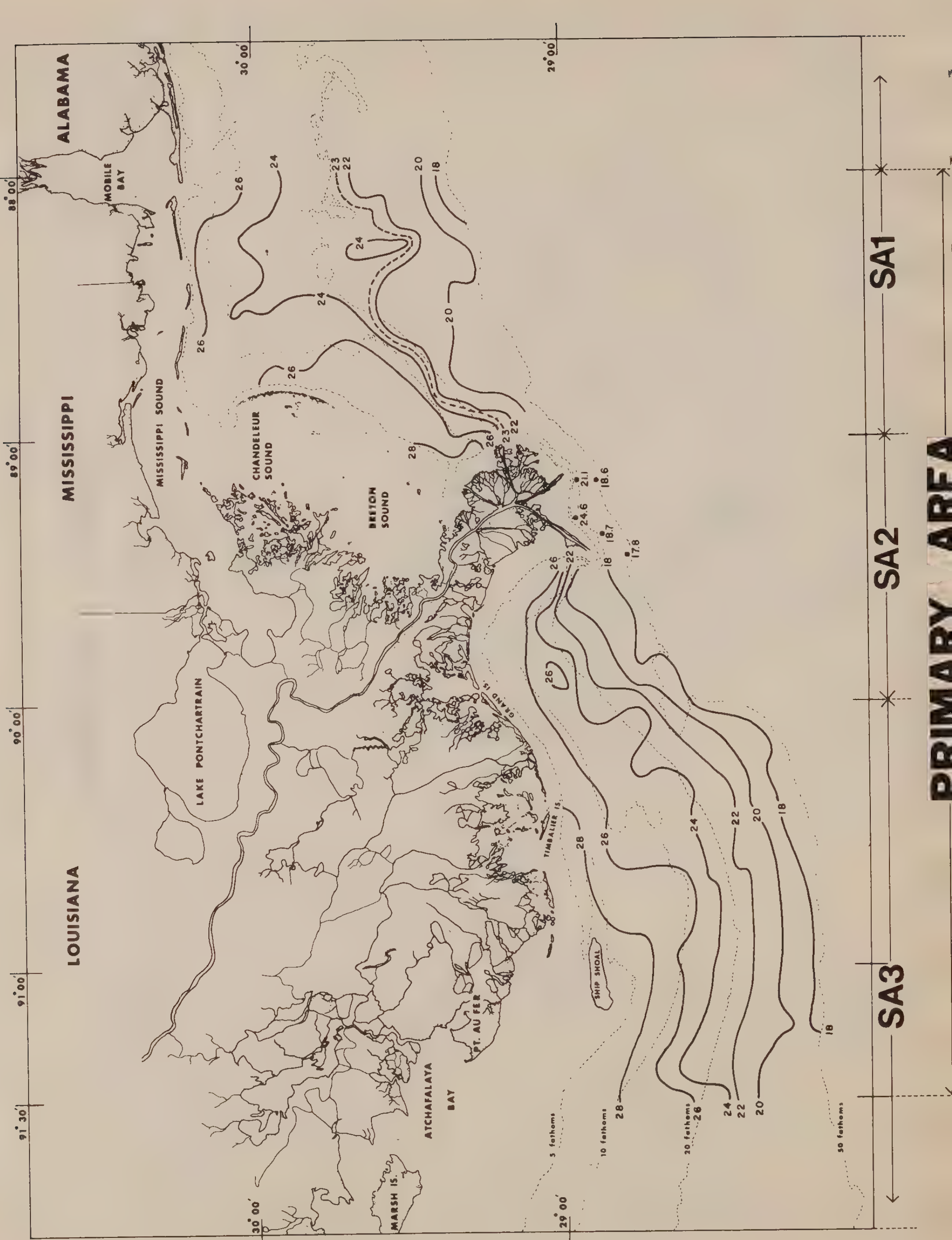

LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
30° 00′
29° 00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
28
29
29.2
29.5
29.7
30
30.2
30.5
31
SA3
SA2
SA1
PRIMARY AREA

Figure 20.—Cruise 52, surface temperature (°C), August 1974.


ALABAMA
MISSISSIPPI
LOUISIANA
MOBILE BAY
MISSISSIPPI SOUND
CHANDELEUR SOUND
BRETON SOUND
LAKE PONTCHARTRAIN
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
PT. AU FER
ATCHAFALAYA BAY
MARSH IS.
88°00'
89°00'
90°00'
91°00'
91°30'
30°00'
29°00'
5 fathoms
10 fathoms
20 fathoms
50 fathoms
28
26
24
23
22
20
18
21.1
18.6
24.6
18.7
17.8
SA1
SA2
SA3
PRIMARY AREA

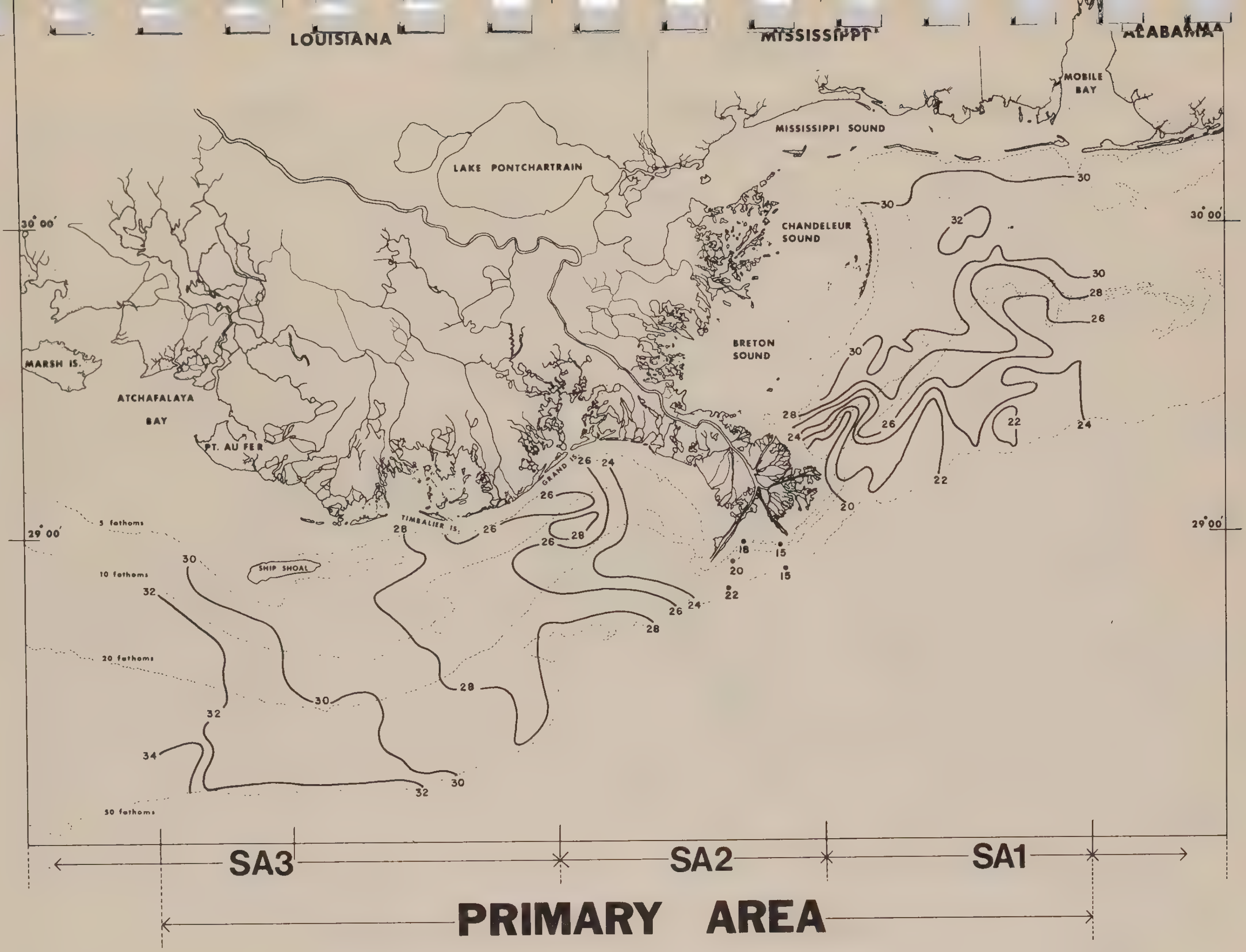
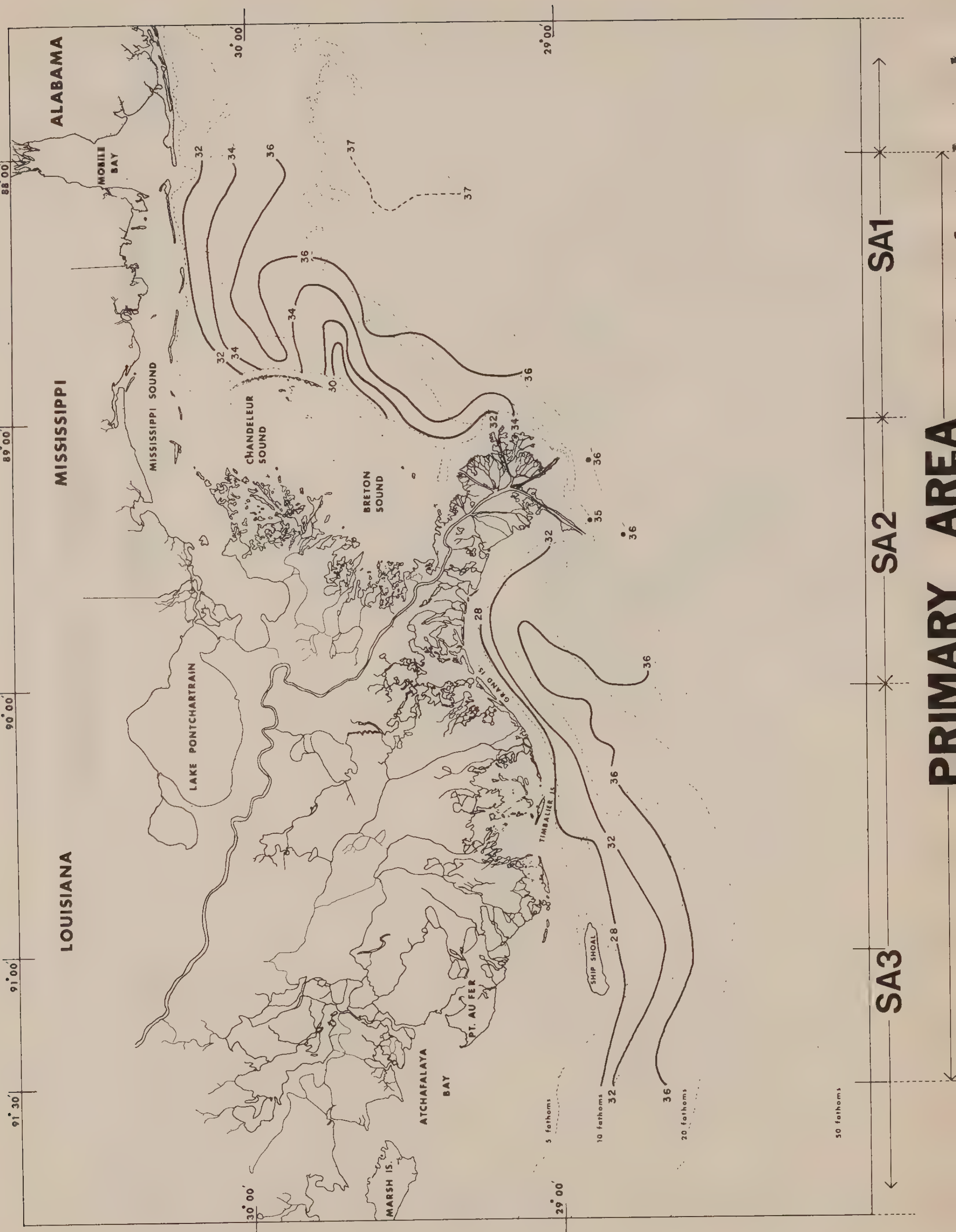

LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
TIMBALIER IS.
GRAND IS.
SHIP SHOAL
30°00′
29°00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
15
18
20
22
24
26
28
30
32
34
SA3
SA2
SA1
PRIMARY AREA

Figure 22.—Cruise 52, surface salinity (ppt), August 1974.


ALABAMA
MOBILE BAY
MISSISSIPPI
MISSISSIPPI SOUND
CHANDELEUR SOUND
BRETON SOUND
LOUISIANA
LAKE PONTCHARTRAIN
GRAND IS
TIMBALIER IS
SHIP SHOAL
PT. AU FER
ATCHAFALAYA BAY
MARSH IS.
88°00'
89°00'
90°00'
91°00'
91°30'
30°00'
29°00'
30°00'
29°00'
32
34
36
37
37
36
34
32
34
30
36
32
34
36
35
36
32
28
36
36
32
28
32
36
5 fathoms
10 fathoms
20 fathoms
50 fathoms
SA1
SA2
SA3
PRIMARY AREA

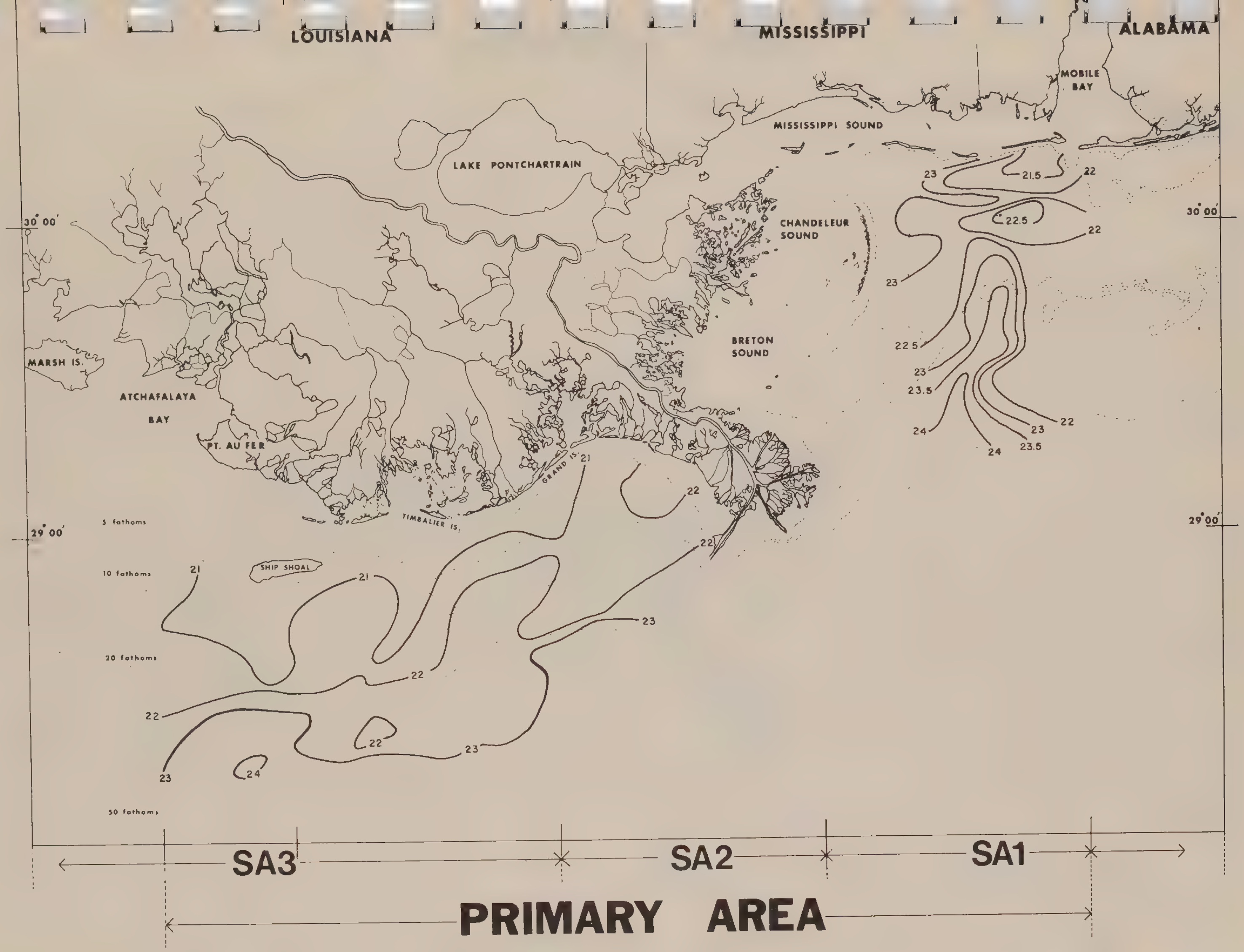
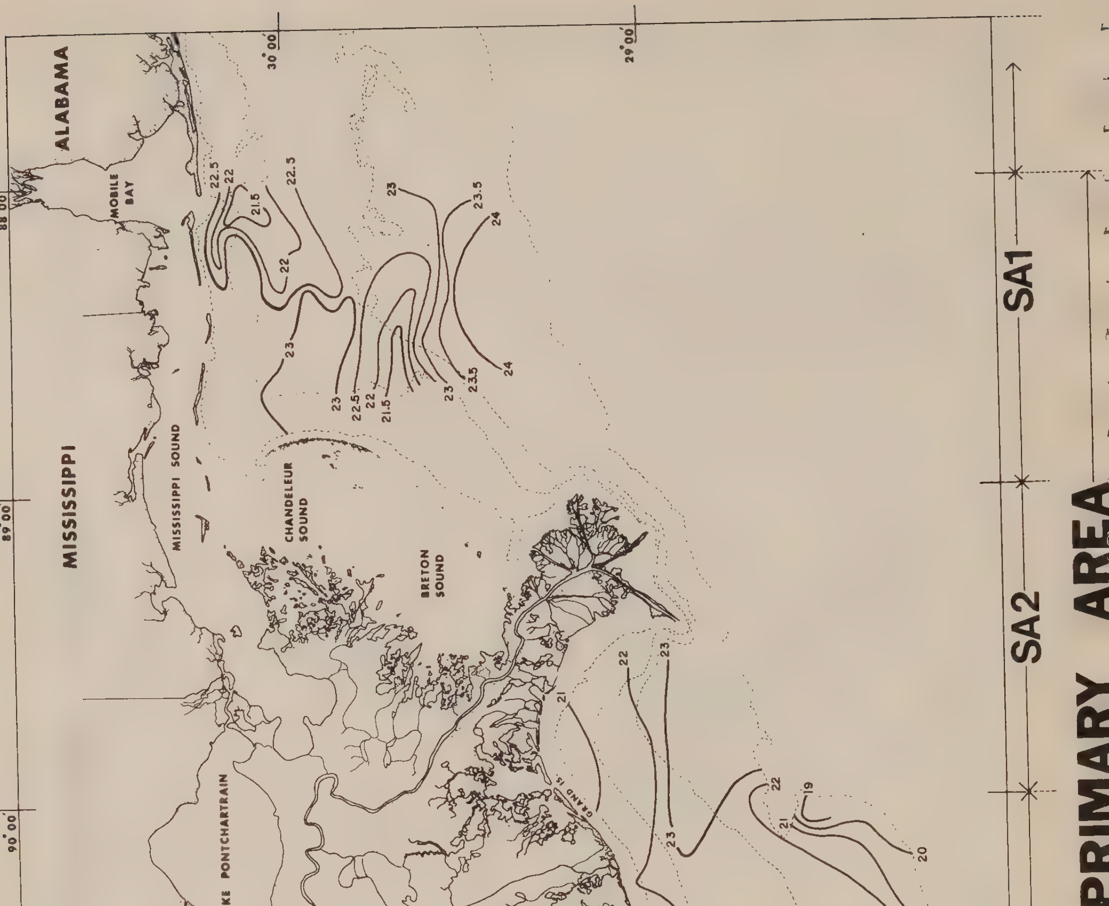

LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
30° 00′
29° 00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
21.5
22
22.5
23
23.5
24
21
SA1
SA2
SA3
PRIMARY AREA

Figure 24.—Cruise 55, surface temperature (°C), November 1974.


PRIMARY AREA
SA1
SA2
SA3
ALABAMA
MISSISSIPPI
LOUISIANA
MOBILE BAY
MISSISSIPPI SOUND
CHANDELEUR SOUND
BRETON SOUND
LAKE PONTCHARTRAIN
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
PT. AU FER
ATCHAFALAYA BAY
MARSH IS.
5 fathoms
10 fathoms
20 fathoms
30 fathoms
88°00'
89°00'
90°00'
91°00'
91°30'
30°00'
29°00'
22.5
22
21.5
23
23.5
24
21
20
19

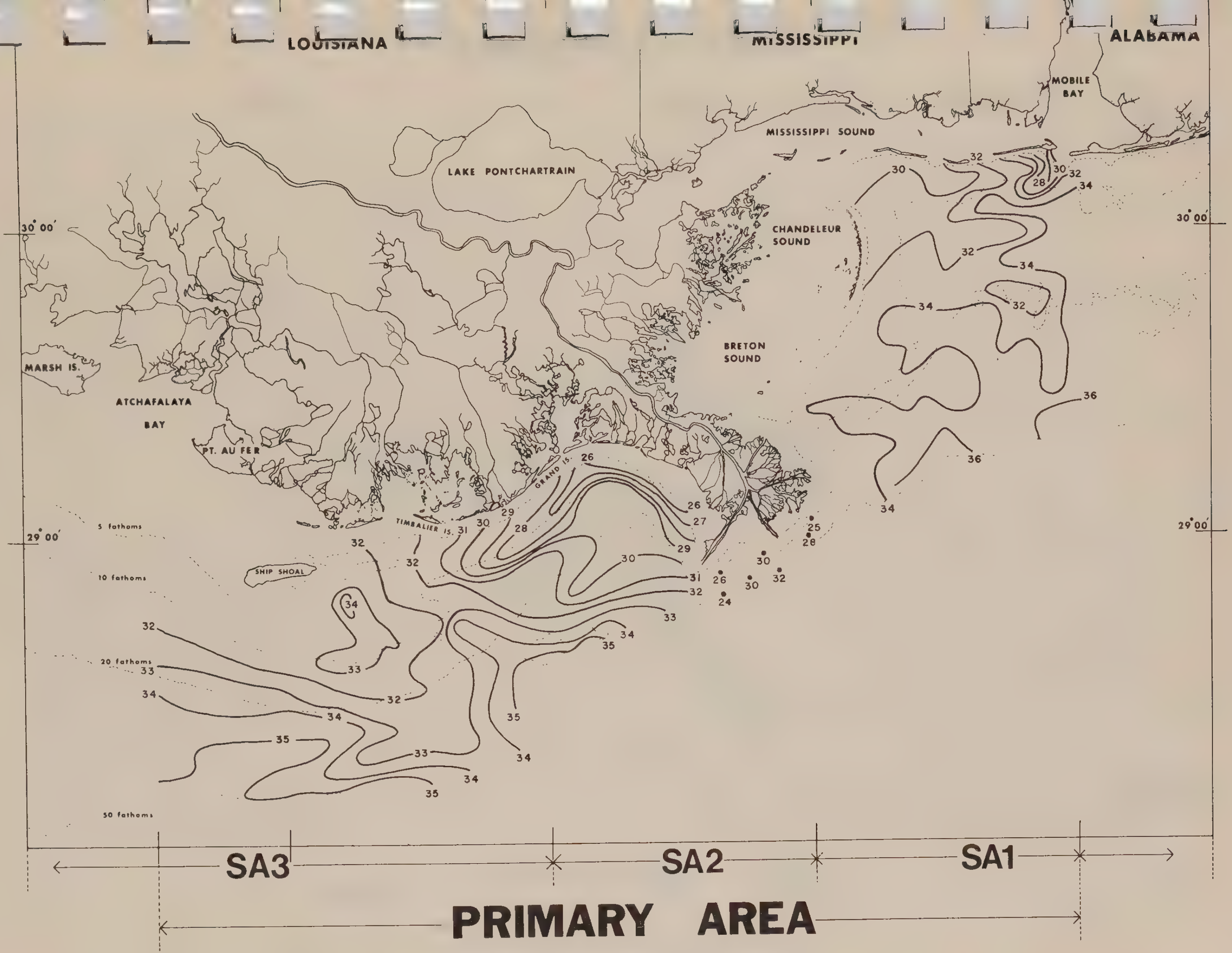
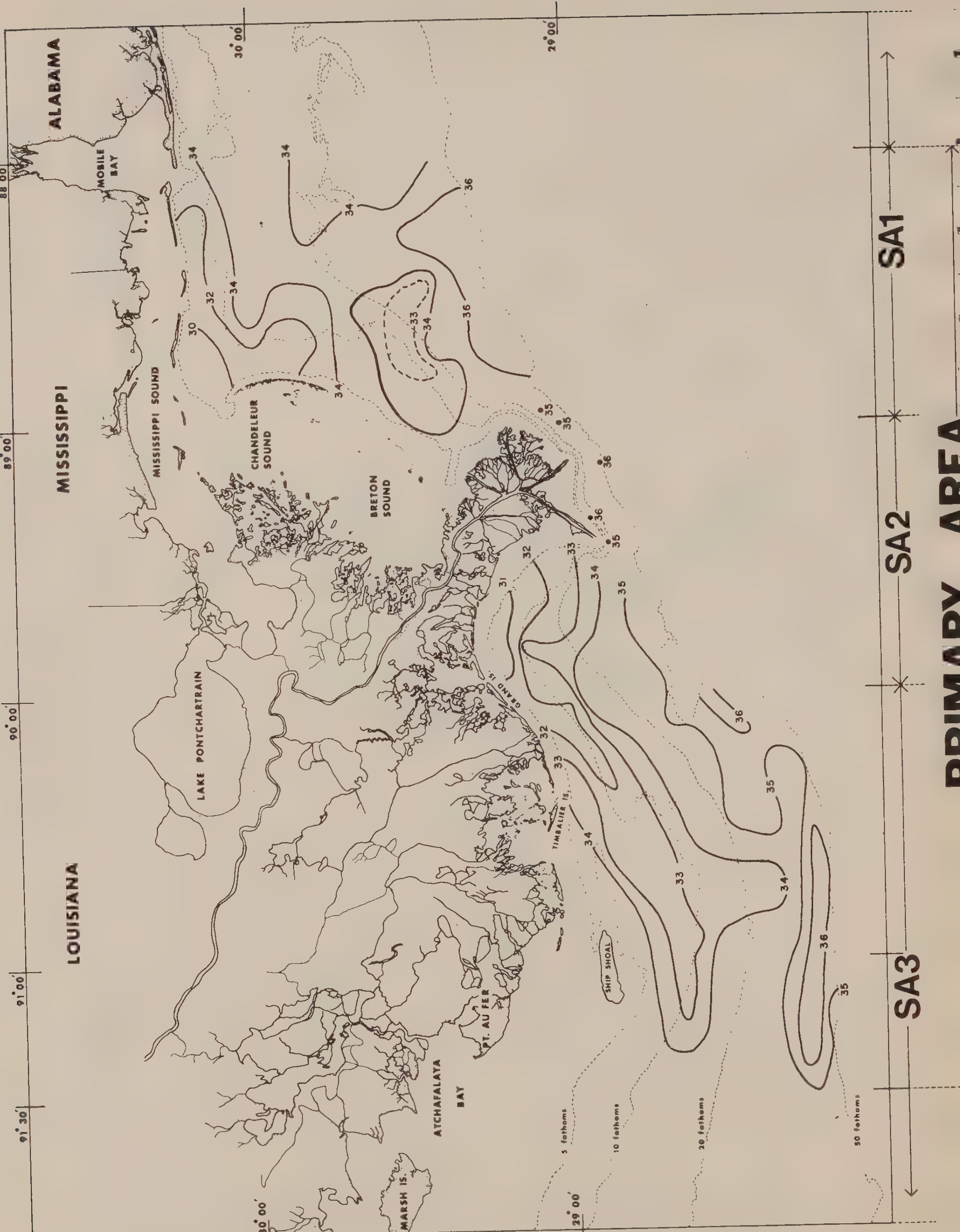

LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
30° 00′
29° 00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
SA1
SA2
SA3
PRIMARY AREA

Figure 26.—Cruise 55, surface salinity (ppt), November 1974.


ALABAMA
MISSISSIPPI
LOUISIANA
MOBILE BAY
MISSISSIPPI SOUND
CHANDELEUR SOUND
BRETON SOUND
LAKE PONTCHARTRAIN
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
PT. AU FER
ATCHAFALAYA BAY
MARSH IS.
5 fathoms
10 fathoms
20 fathoms
50 fathoms
88°00'
89°00'
90°00'
91°00'
91°30'
30°00'
29°00'
30
31
32
33
34
35
36
SA1
SA2
SA3
PRIMARY AREA

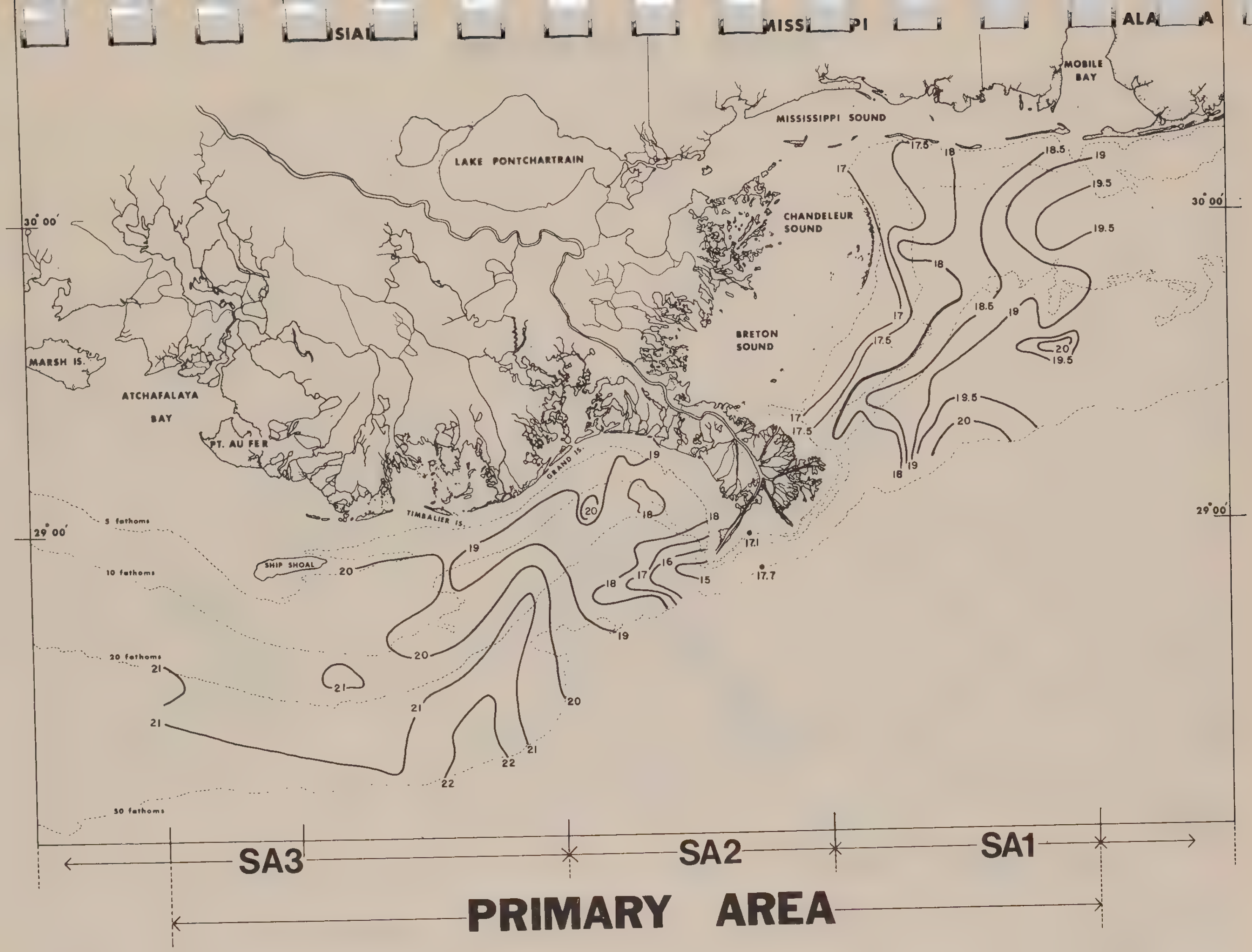
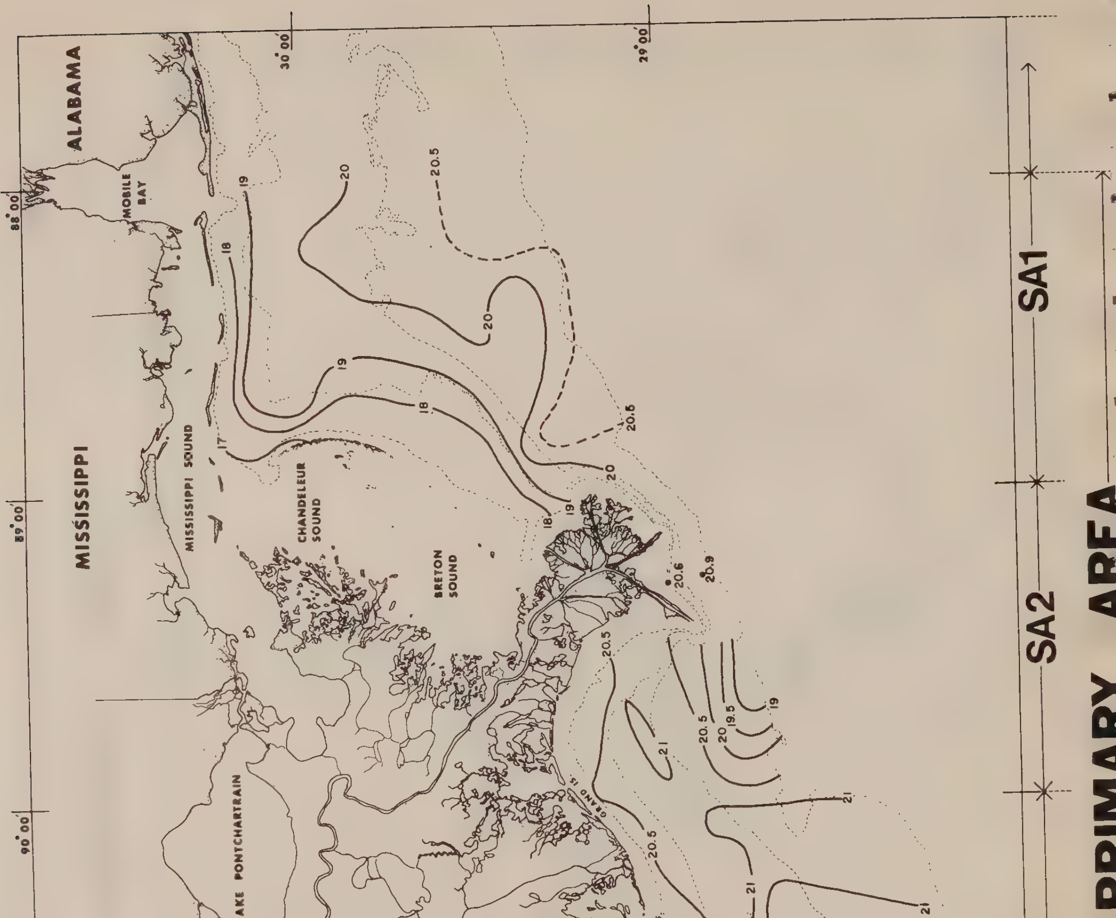

ALA A
MISS PI
SIA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
30° 00′
29° 00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
15
16
17
17.1
17.5
17.7
18
18.5
19
19.5
20
21
22
SA1
SA2
SA3
PRIMARY AREA

Figure 28.—Cruise 57, surface temperature (°C), March 1975.


ALABAMA
MISSISSIPPI
LOUISIANA
MOBILE BAY
MISSISSIPPI SOUND
CHANDELEUR SOUND
BRETON SOUND
LAKE PONTCHARTRAIN
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
PT. AU FER
ATCHAFALAYA BAY
MARSH IS.
88° 00'
89° 00'
90° 00'
91° 00'
91° 30'
30° 00'
29° 00'
5 fathoms
10 fathoms
20 fathoms
30 fathoms
17
18
19
19.5
20
20.5
20.6
20.9
21
SA1
SA2
SA3

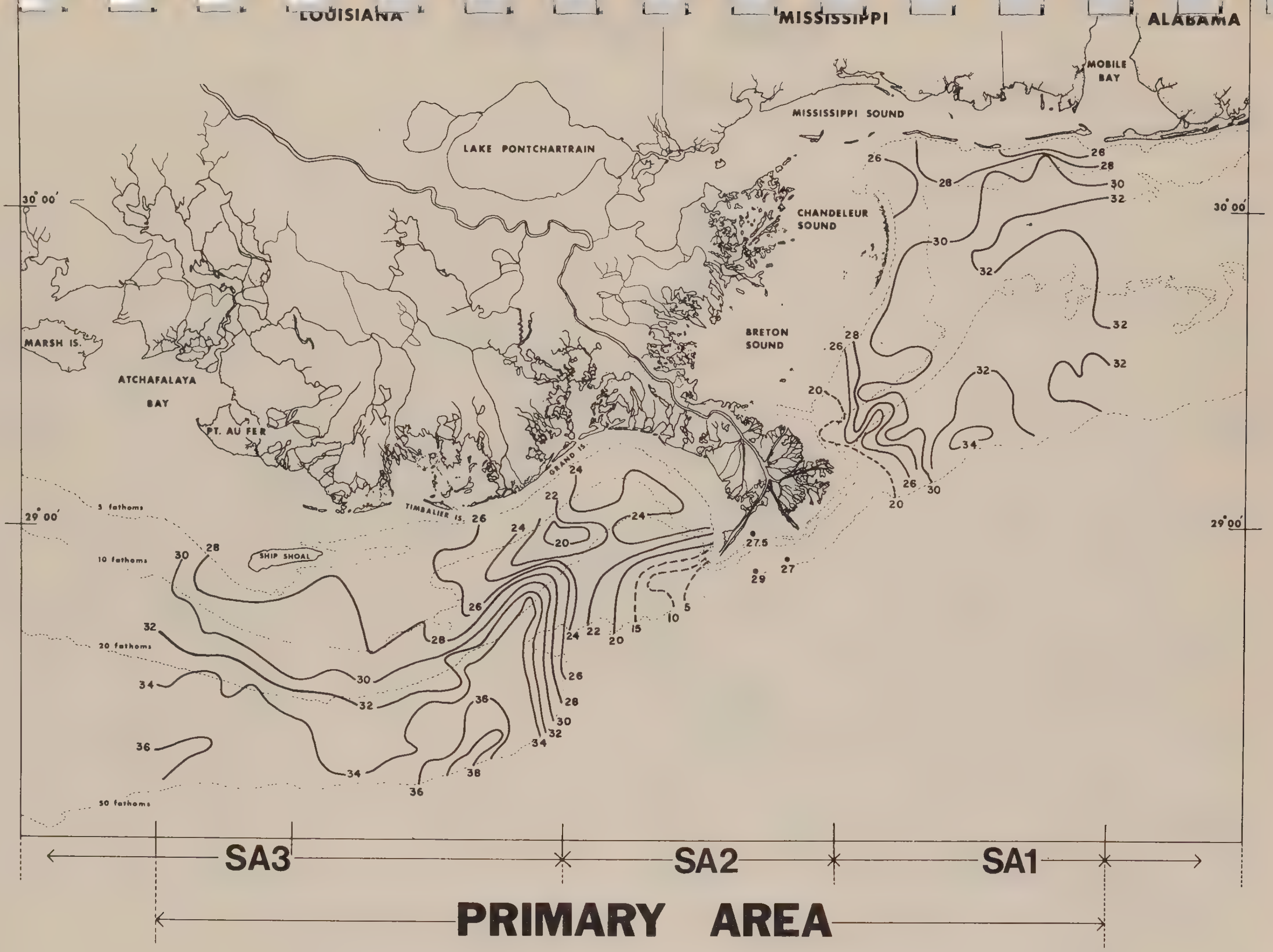
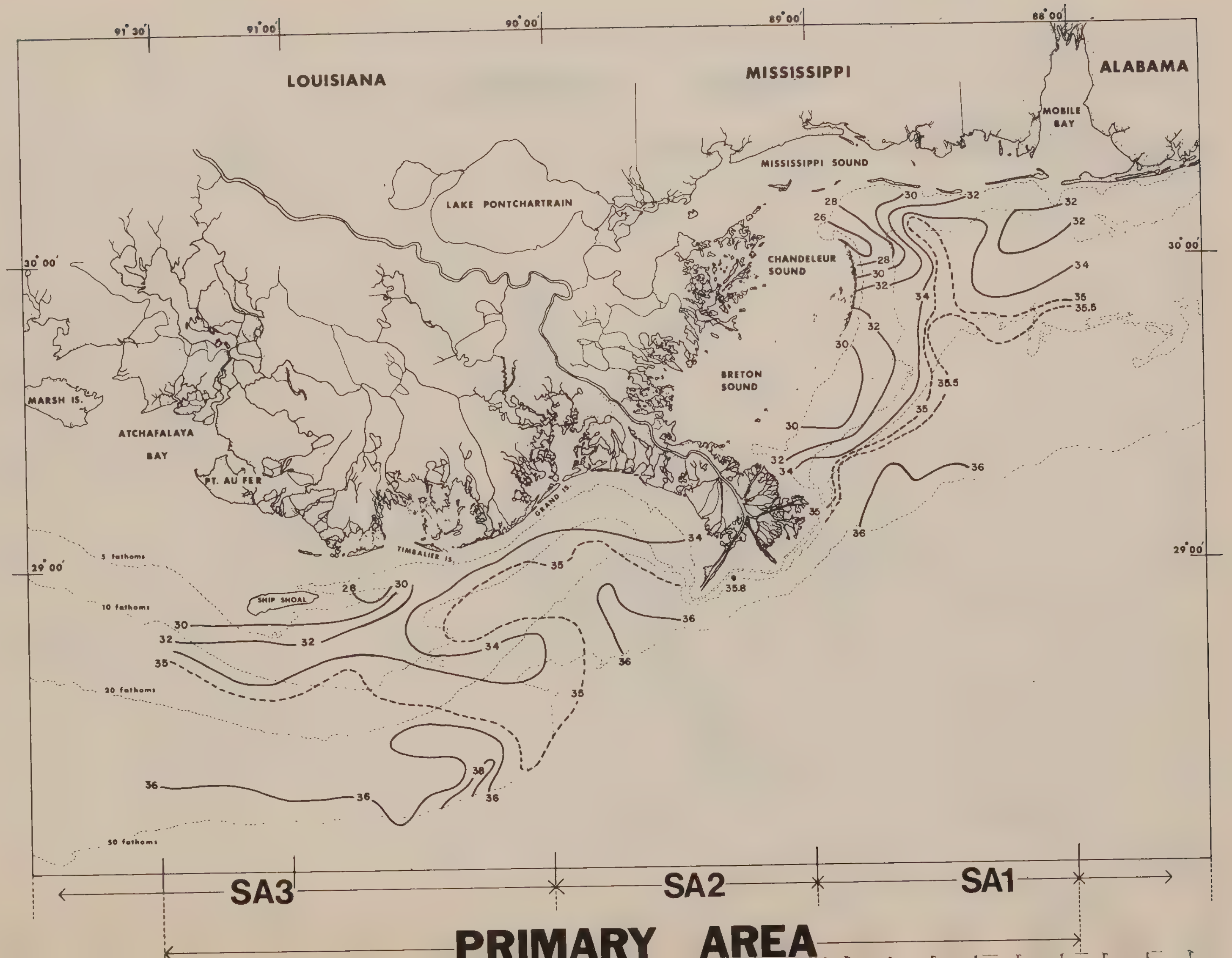

LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
30° 00′
29° 00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
5
10
15
20
22
24
26
27
27.5
28
29
30
32
34
36
38
SA3
SA2
SA1
PRIMARY AREA

Figure 30.—Cruise 57, surface salinity (ppt), March 1975.


LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
91° 30′
91° 00′
90° 00′
89° 00′
88° 00′
30° 00′
29° 00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
26
28
30
32
34
35
35.5
35.8
36
SA3
SA2
SA1
PRIMARY AREA

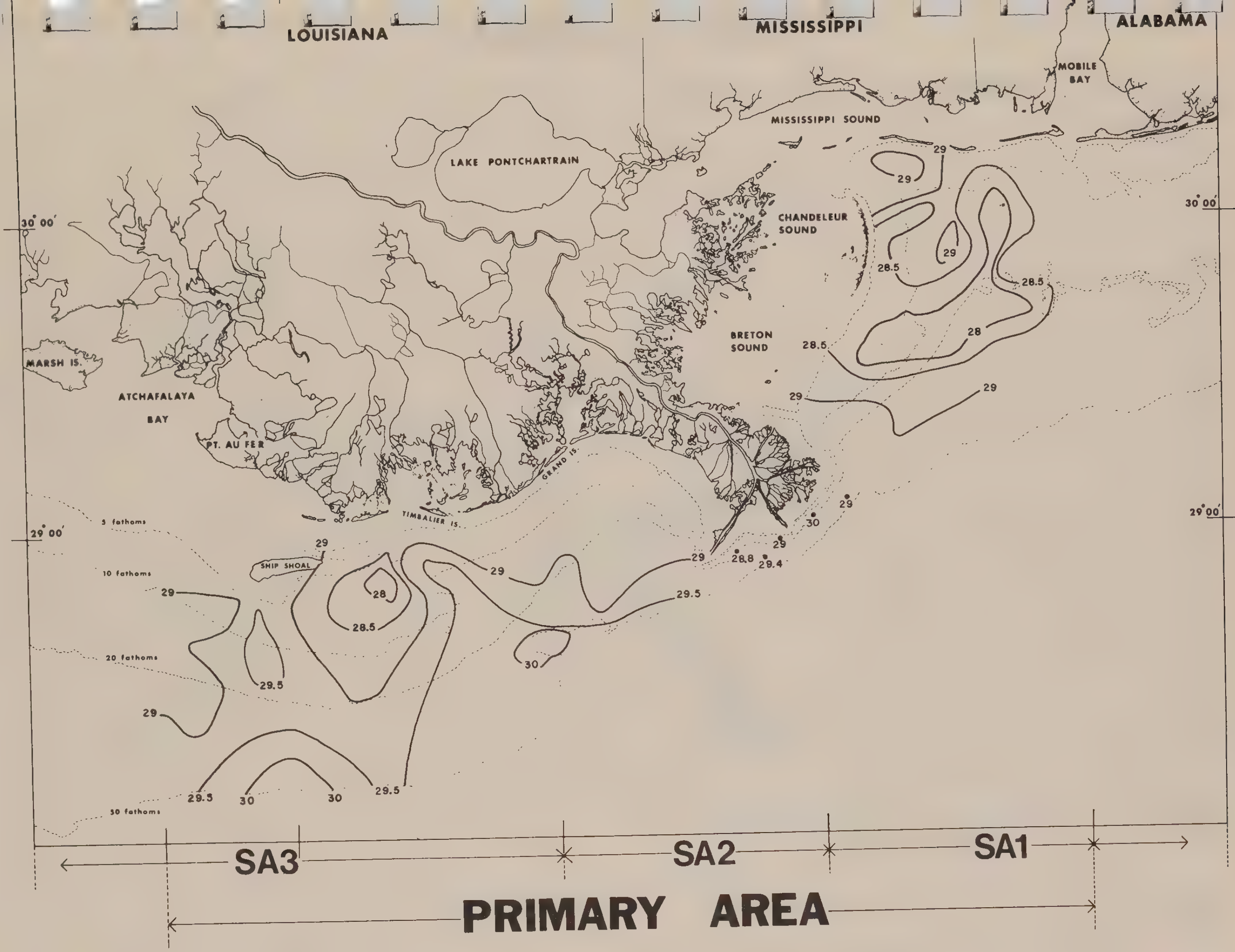
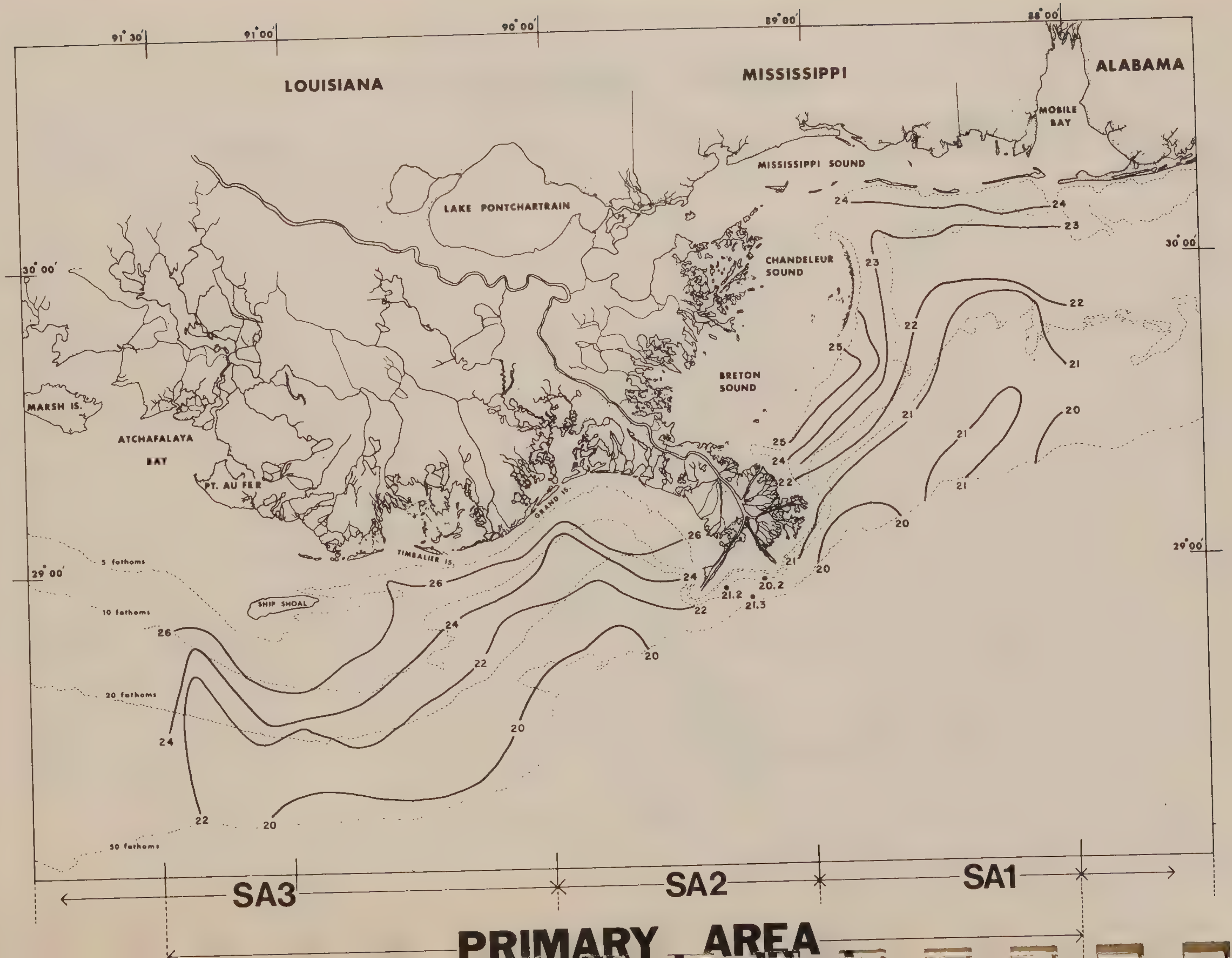

LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
TIMBALIER IS.
GRAND IS.
SHIP SHOAL
30° 00′
29° 00′
5 fathoms
10 fathoms
20 fathoms
30 fathoms
29
29
28.5
29
28.5
28
28.5
29
29
29
30
29
28.8
29.4
29
29.5
29
28
28.5
30
29
29.5
29
29.5
30
30
29.5
SA3
SA2
SA1
PRIMARY AREA

Figure 32.—Cruise 60, surface temperature (°C), July 1975.


91° 30'
91° 00'
90° 00'
89° 00'
88° 00'
30° 00'
29° 00'
LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
5 fathoms
10 fathoms
20 fathoms
50 fathoms
24
23
22
21
20
25
26
20.2
21.2
21.3
SA3
SA2
SA1
PRIMARY AREA

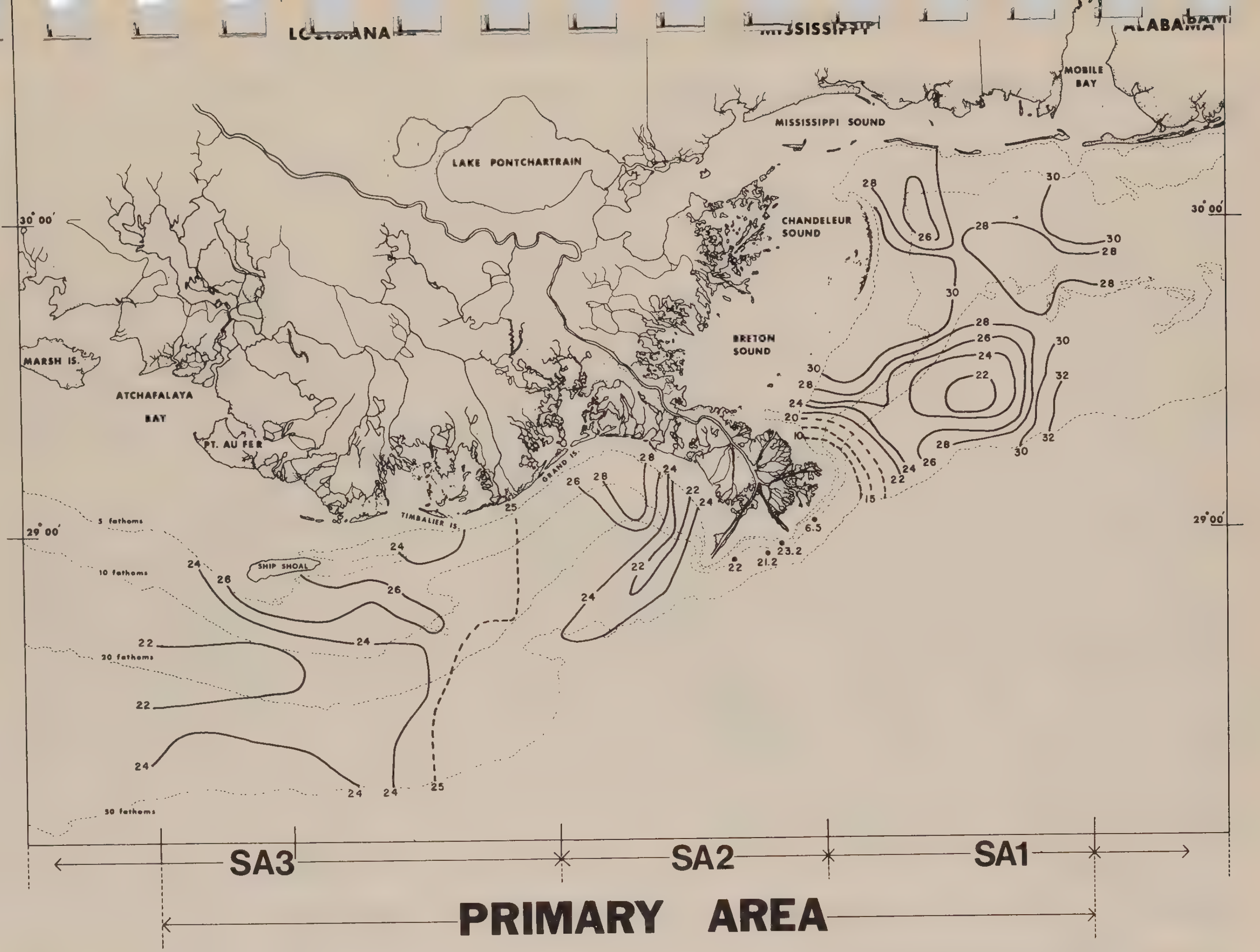
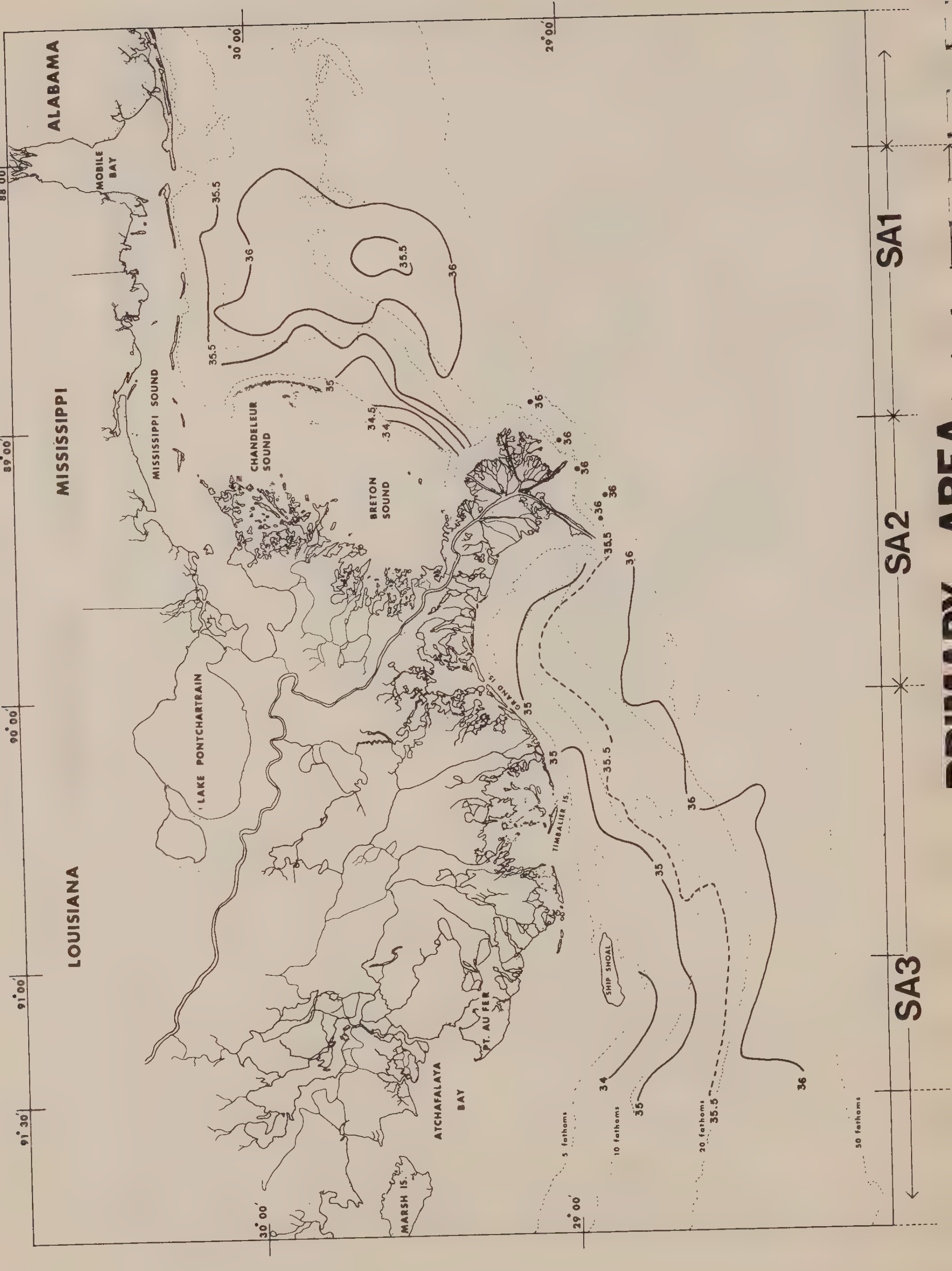

LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
TIMBALIER IS.
GRAND IS.
SHIP SHOAL
30° 00′
29° 00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
6.5
23.2
21.2
22
SA3
SA2
SA1
PRIMARY AREA

Figure 34.—Cruise 60, surface salinity (ppt), July 1975.


ALABAMA
MOBILE BAY
MISSISSIPPI
MISSISSIPPI SOUND
CHANDELEUR SOUND
BRETON SOUND
LOUISIANA
LAKE PONTCHARTRAIN
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
PT. AU FER
ATCHAFALAYA BAY
MARSH IS.
88°00'
89°00'
90°00'
91°00'
91°30'
30°00'
29°00'
34
34.5
35
35.5
36
5 fathoms
10 fathoms
20 fathoms
50 fathoms
SA1
SA2
SA3

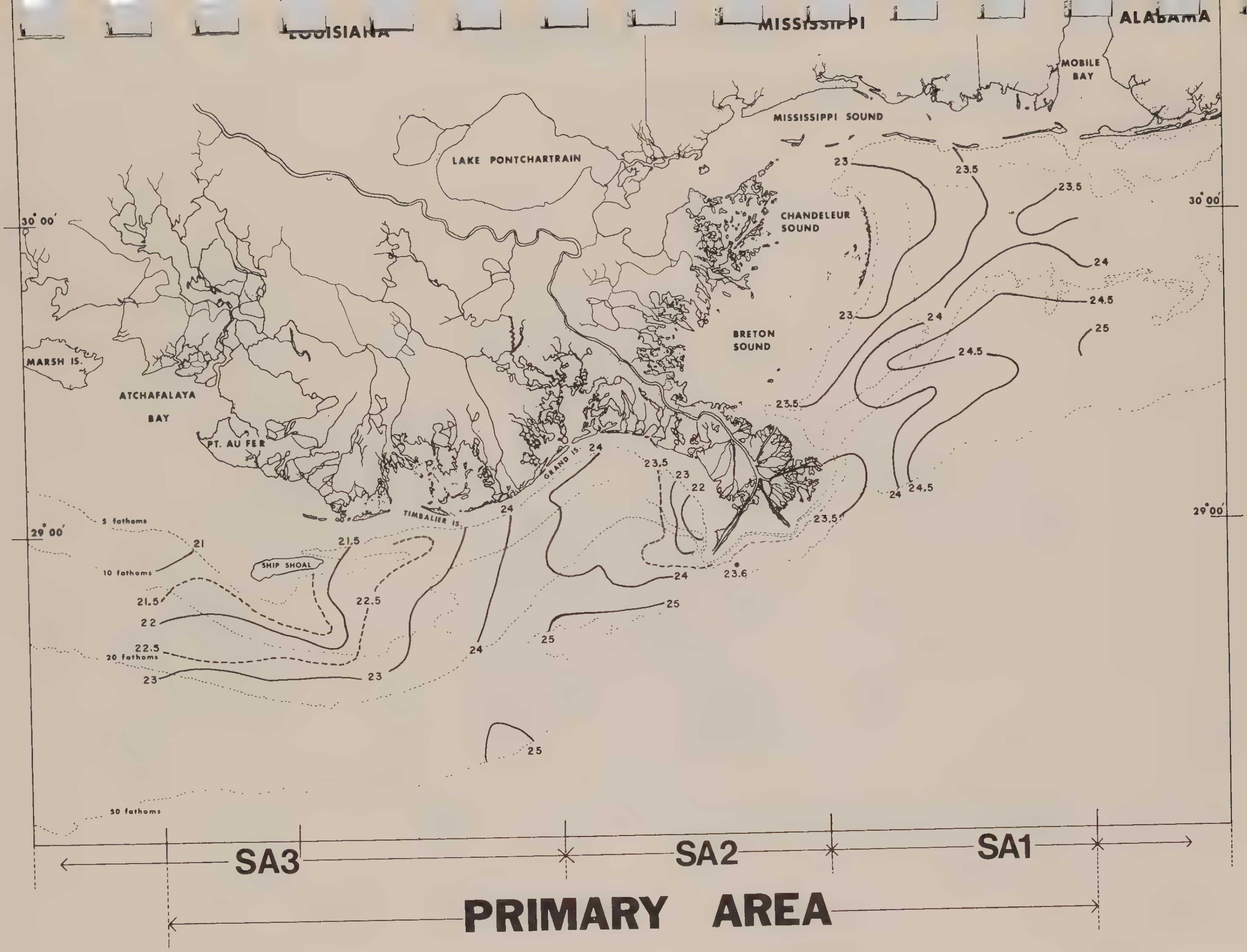
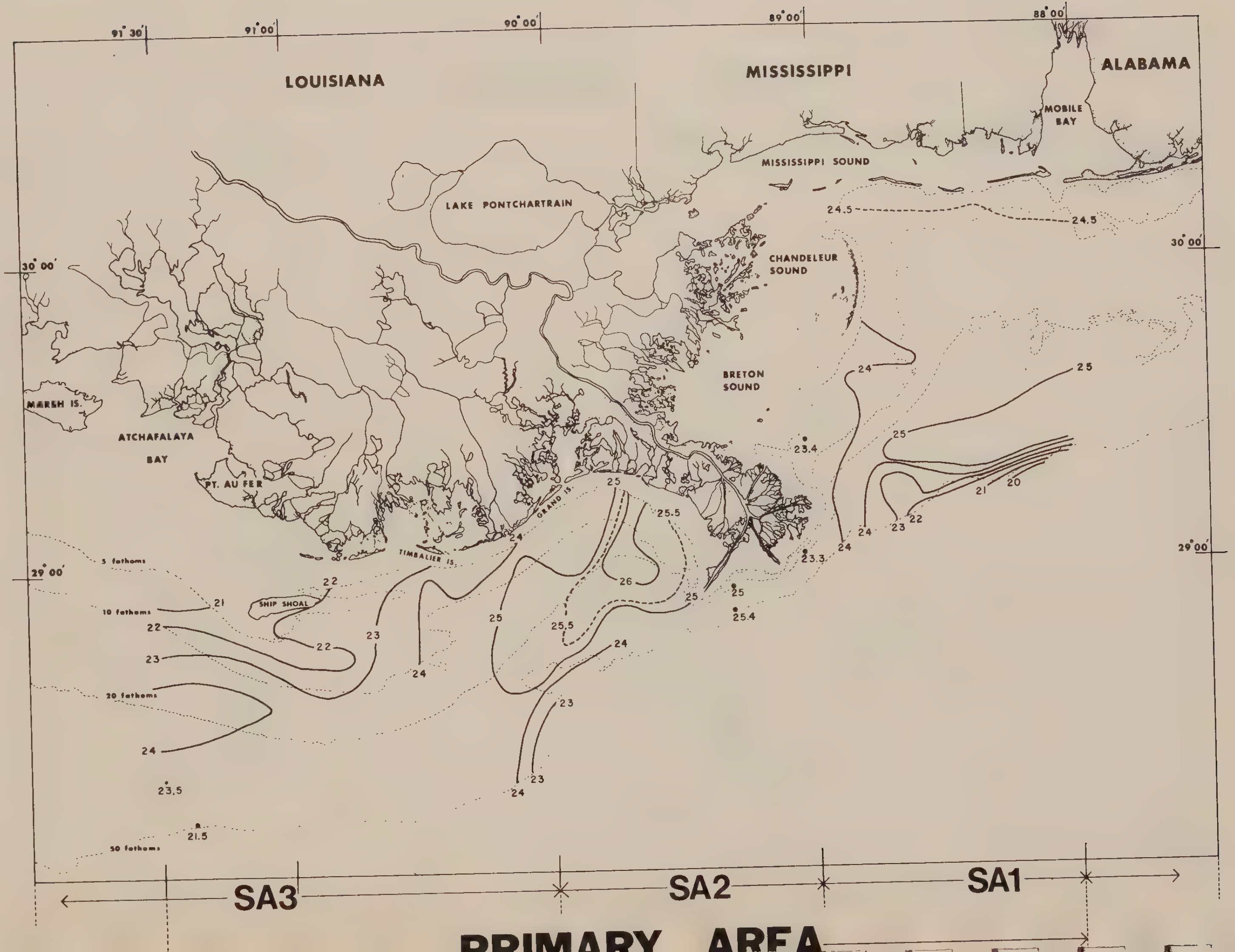

LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
TIMBALIER IS.
GRAND IS.
SHIP SHOAL
30°00′
29°00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
21
21.5
22
22.5
23
23.5
23.6
24
24.5
25
SA3
SA2
SA1
PRIMARY AREA

Figure 36.—Cruise 62, surface temperature (°C), November 1975.


91°30'
91°00'
90°00'
89°00'
88°00'
30°00'
29°00'
LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
5 fathoms
10 fathoms
20 fathoms
50 fathoms
24.5
25
26
25.5
25.4
23.4
23.3
24
23
22
21
20
23.5
21.5
SA1
SA2
SA3
PRIMARY AREA

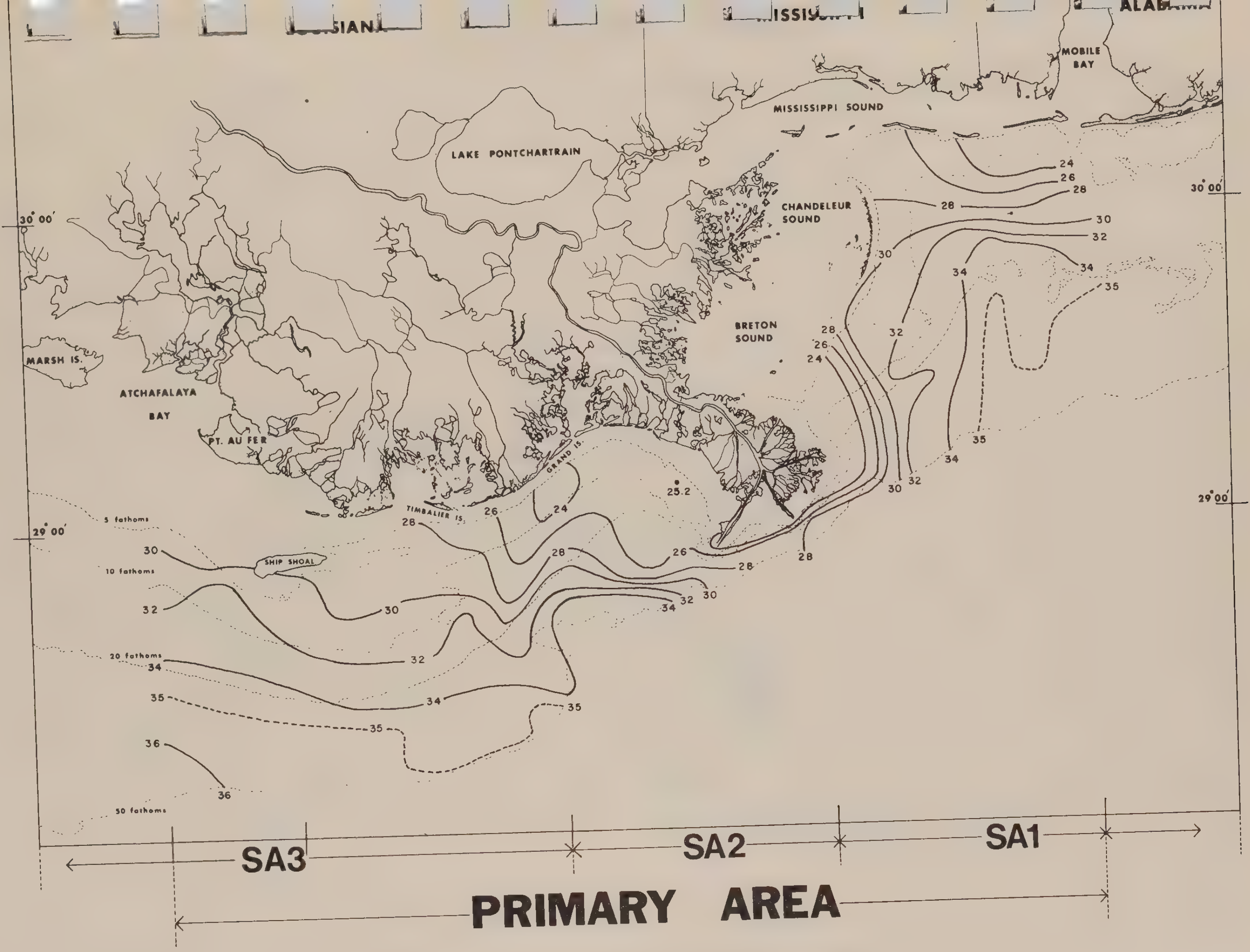
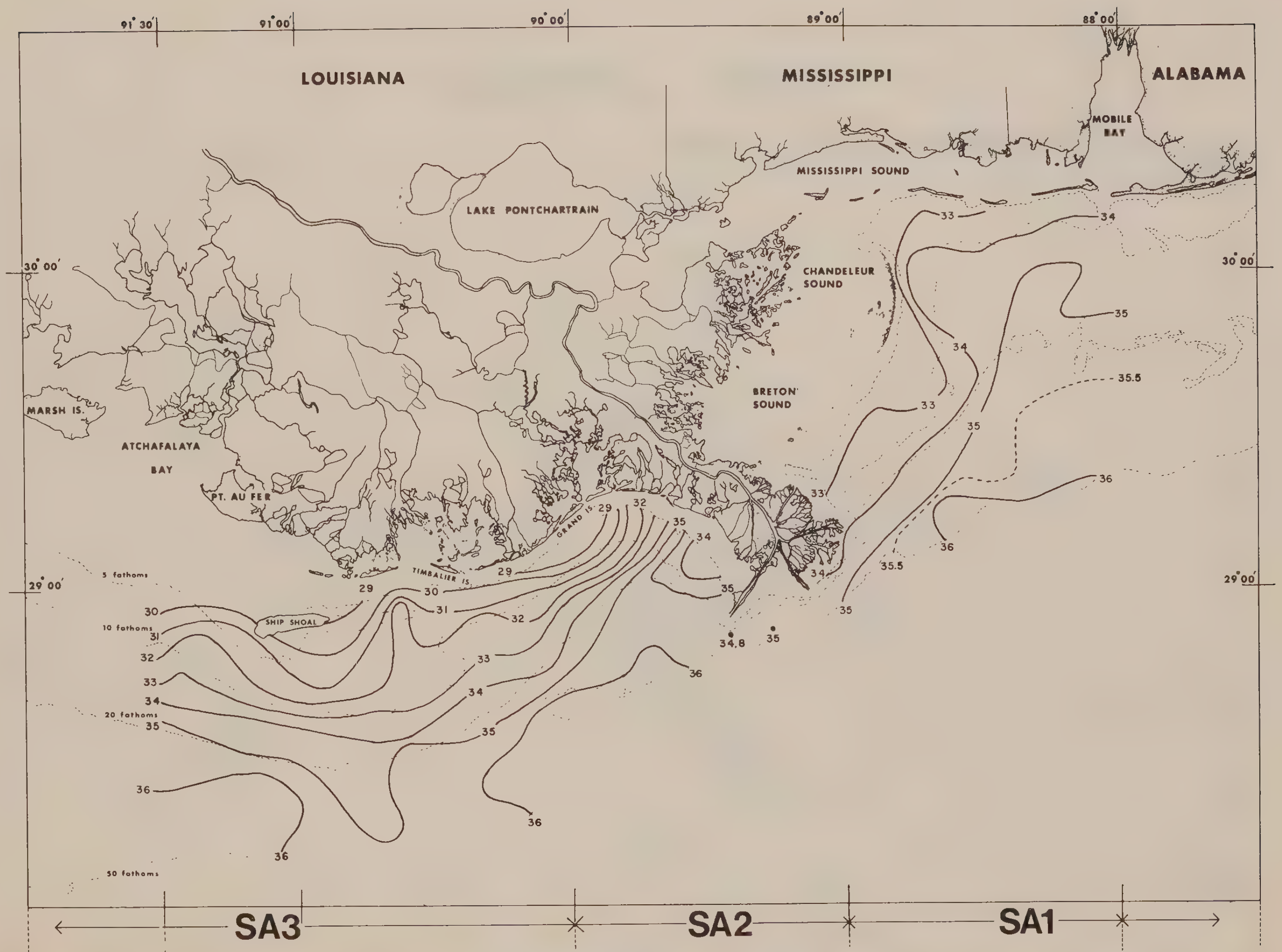

MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
SHIP SHOAL
TIMBALIER IS.
GRAND IS.
30° 00'
29° 00'
5 fathoms
10 fathoms
20 fathoms
50 fathoms
24
26
28
30
32
34
35
36
25.2
SA1
SA2
SA3
PRIMARY AREA

Figure 38.—Cruise 62, surface salinity (ppt), November 1975.


91° 30′
91° 00′
90° 00′
89° 00′
88° 00′
30° 00′
29° 00′
LOUISIANA
MISSISSIPPI
ALABAMA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
5 fathoms
10 fathoms
20 fathoms
50 fathoms
29
30
31
32
33
34
35
35.5
36
34.8
SA3
SA2
SA1

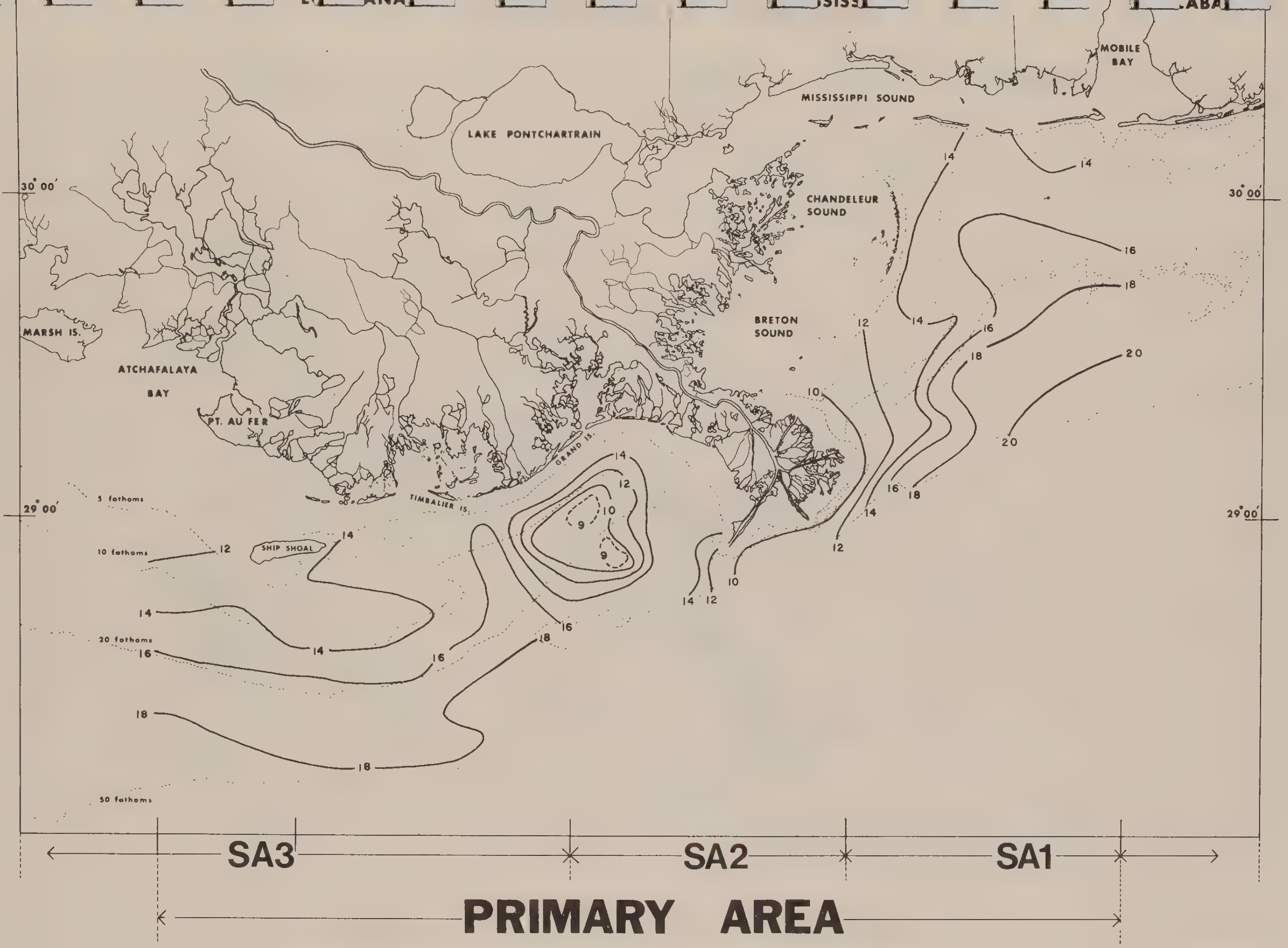
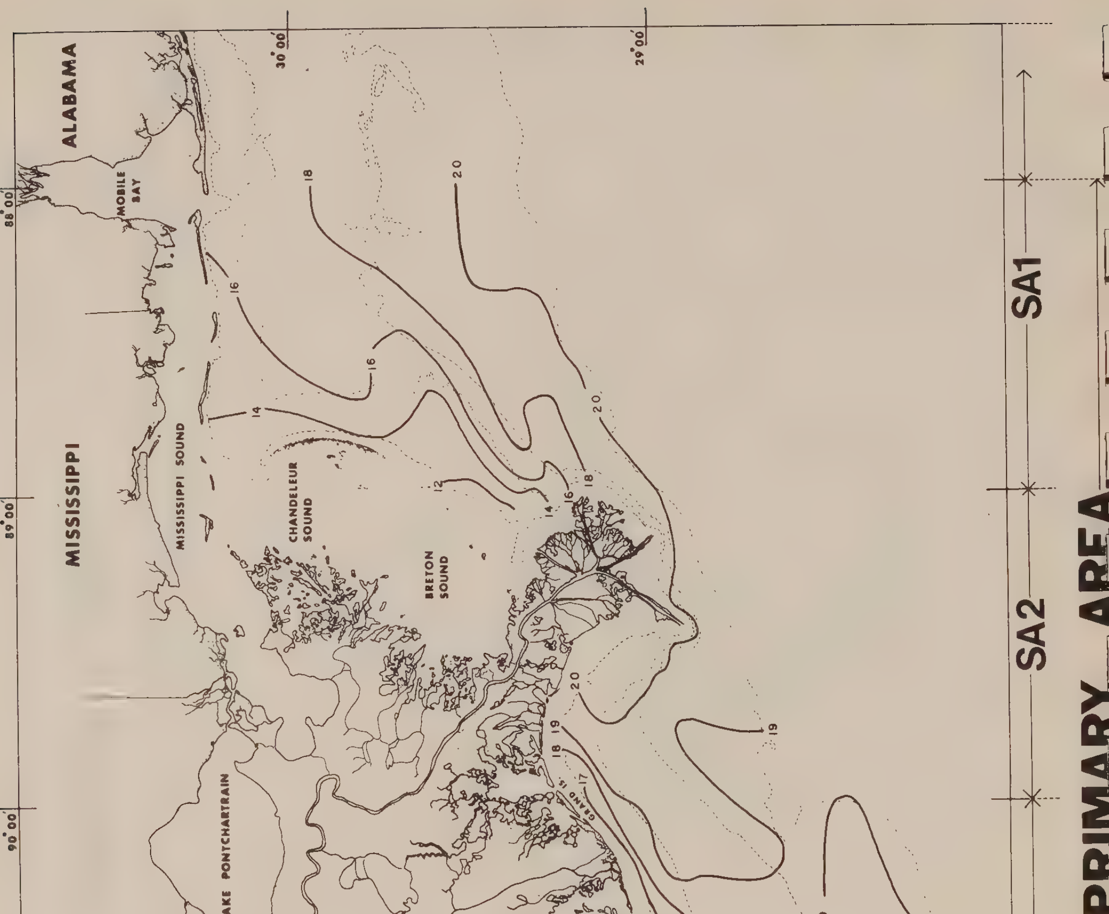
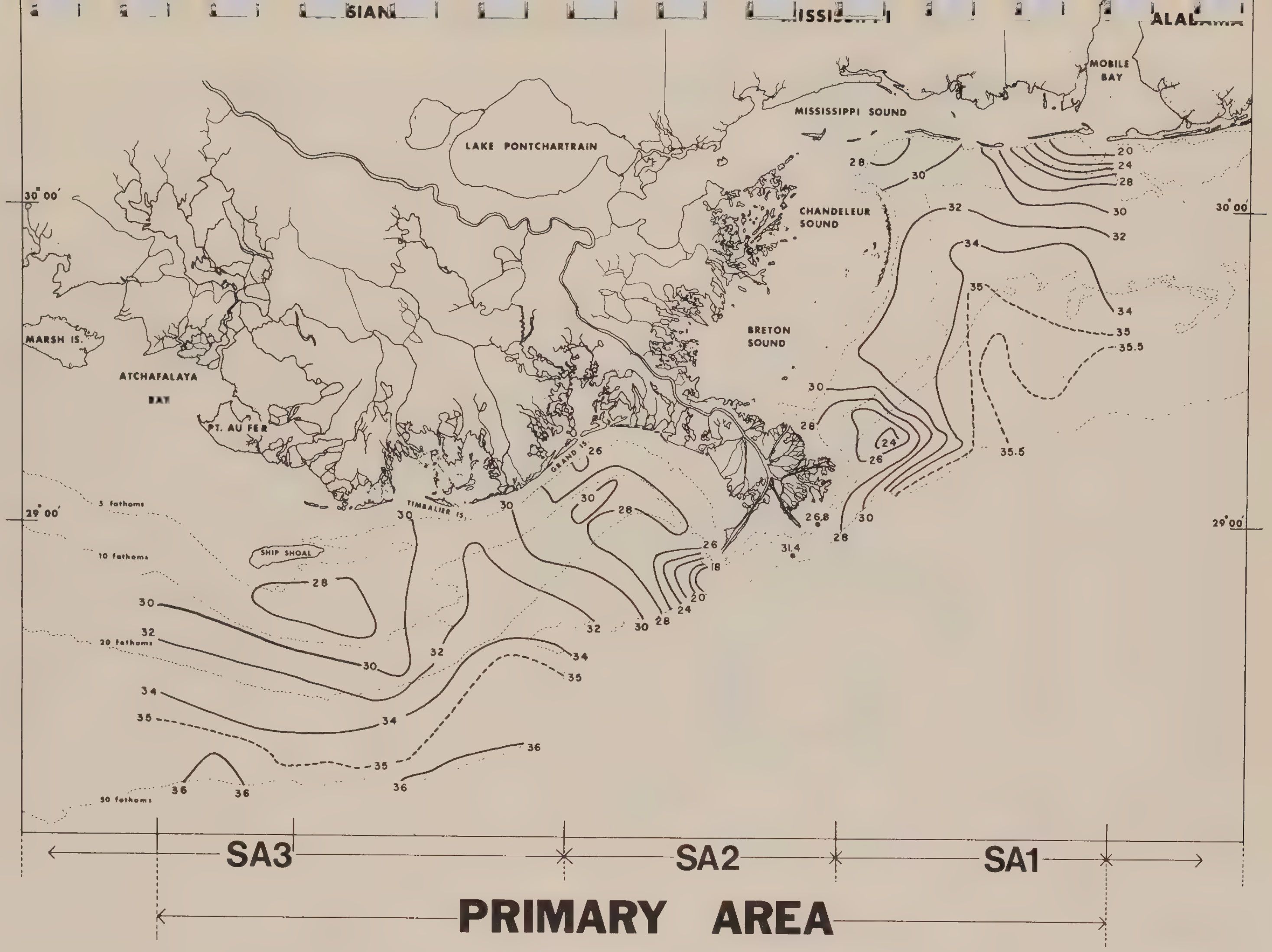

MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
30° 00′
29° 00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
9
10
12
14
16
18
20
SA3
SA2
SA1
PRIMARY AREA

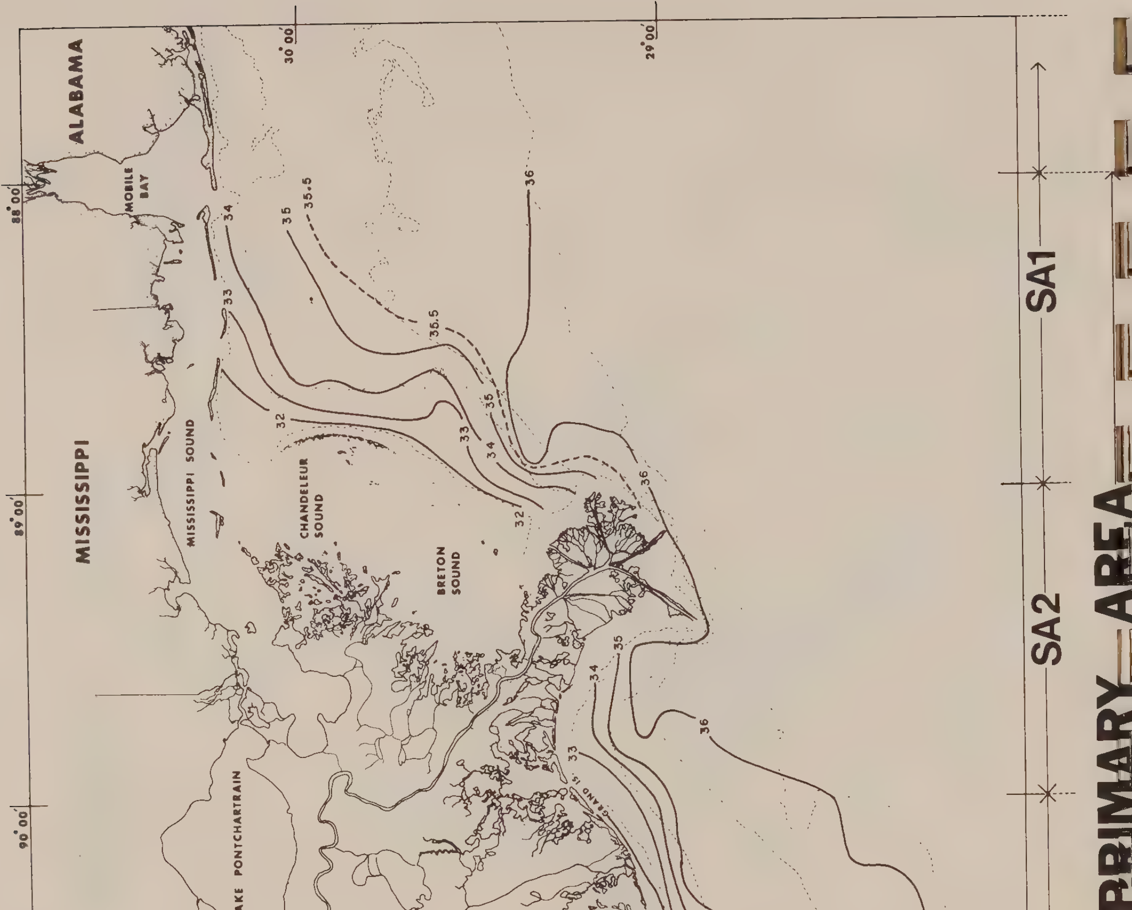
Figure 40.—Cruise 64, surface temperature (°C), January 1976.


ALABAMA
MOBILE BAY
MISSISSIPPI
MISSISSIPPI SOUND
CHANDELEUR SOUND
BRETON SOUND
LAKE PONTCHARTRAIN
LOUISIANA
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
PT. AU FER
ATCHAFALAYA BAY
MARSH IS.
88°00'
89°00'
90°00'
91°00'
91°30'
30°00'
29°00'
5 fathoms
10 fathoms
20 fathoms
50 fathoms
12
14
15
16
17
18
19
20
SA1
SA2
SA3
PRIMARY AREA



ALABAMA
MISSISSIPPI
LOUISIANA
MOBILE BAY
MISSISSIPPI SOUND
LAKE PONTCHARTRAIN
CHANDELEUR SOUND
BRETON SOUND
MARSH IS.
ATCHAFALAYA BAY
PT. AU FER
TIMBALIER IS.
GRAND IS.
SHIP SHOAL
30° 00′
29° 00′
5 fathoms
10 fathoms
20 fathoms
50 fathoms
20
24
28
30
32
34
35
35.5
26
18
26.8
31.4
36
SA3
SA2
SA1
PRIMARY AREA

Figure 42.—Cruise 64, surface salinity (ppt), January 1976.


ALABAMA
MOBILE BAY
MISSISSIPPI
MISSISSIPPI SOUND
CHANDELEUR SOUND
BRETON SOUND
LAKE PONTCHARTRAIN
LOUISIANA
GRAND IS.
TIMBALIER IS.
SHIP SHOAL
PT. AU FER
ATCHAFALAYA BAY
MARSH IS.
88°00'
89°00'
90°00'
91°00'
91°30'
30°00'
29°00'
5 fathoms
10 fathoms
20 fathoms
50 fathoms
28
32
33
34
35
35.5
36
SA1
SA2
SA3
PRIMARY AREA

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NOAA Technical Report NMFS SSRF-720

Sea Surface Temperature Distributions Obtained Off San Diego, California, Using an Airborne Infrared Radiometer

James L. Squire, Jr.

March 1978

U.S. DEPARTMENT OF COMMERCE
Juanita M. Kreps, Secretary
National Oceanic and Atmospheric Administration
Richard A. Frank, Administrator
National Marine Fisheries Service

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Sea Surface Temperature Distributions Obtained Off San Diego, California, Using an Airborne Infrared Radiometer

JAMES L. SQUIRE, JR.[1]

ABSTRACT

Sea surface temperature surveys were conducted weekly off San Diego, Calif., using an airborne infrared radiometer during the months of April through October 1972-74. A total of 90 surveys were made over the 320-mile flight track. The analog chart record of temperature was keyed to a "ground truth" temperature measurement and read to determine 1 min average temperatures which were plotted on the flight track and 1°F (0.56°C) isotherms were contoured from the data. The trend of sea surface temperatures during the 3-yr period showed warmer temperatures in 1972, which was an "El Niño" year, cooler in 1973, warmer than 1973 in 1974, but not as warm as 1972. In early July 1974, an anomalous warming period occurred and highest average temperatures of 73°F (22.7°C) were recorded in 19 July 1974. Lowest average temperature of 54°F (12.2°C) was recorded on 2 April 1973.

The 1972-74 survey temperatures taken over the "ground truth" calibration site were compared with a time series of temperature observations taken during the same months from 1963 to 1968. The average temperature during 1963-68 was 63.4°F (17.4°C) and for 1972-74, 64.1°F (17.8°C), a difference of less than 1°F (0.56°C). Average monthly temperature differences, 1963-68 compared with 1972-74, shows April the same, warmer 2°F (1.12°C) for May, 3°F (1.68°C) for June, 1°F (0.56°C) for July, same for August, 1°F (0.56°C) less for September, and 2°F (1.12°C) less for October.

INTRODUCTION

ynoptic sea surface temperature surveys with an air- ne infrared radiometer were first conducted off the ic coast in August 1963 over the coastal waters of ington, Oregon, and California by the National rine Fisheries Service's (NMFS) Tiburon Fisheries oratory at Tiburon, Calif. Surveys over three areas conducted in cooperation with the U.S. Coast d, and these surveys are being continued as part of U.S. Coast Guard oceanographic program. The first 5 of surveys (1963-68) were reviewed by the author re 1971). The objective of the coastal program was crease the general knowledge about the nearshore perature structure, to define areas of nearshore up- ing, and to develop temperature data that may be l in relating the distribution and relative abundance of major coastal species of fishes to sea surface perature and its changes.

e initial surveys, conducted monthly, were broad in aphical scope and in time. The data have been use- in computing average catch temperatures for salmon central California, and for a number of pelagic species non to southern California waters (Squire unpubl. uscr.). However, this broad-based survey did not er some of the more important coastal fishing areas in sufficient detail and at short enough time intervals to permit the determination of the relation of changes in catch composition and catch rates to short-term temperature fluctuations.

To determine short-term temperature effects, an area having a heavy amount of fishing effort and catch was selected for detailed study. This area covered the southern California coastal waters from near Del Mar, Calif., to south of the United States-Mexico border, and to about 22.3 km (12 n.mi.) offshore. The area, known by the project name of "San Diego Test Area" encompasses the major sportfishing grounds off La Jolla, Point Loma, and about the Coronado Islands off Mexico.

The airborne temperature surveys used a "ladder-type" search pattern, modified to accommodate navigational aids. These surveys were flown once each week, 1 April through 31 October during 1972 to 1974. A total of 90 surveys was made, each requiring about 2 h to complete.

OPERATIONAL PROCEDURES

The airborne sea surface temperature sensing unit used in the study was a Barnes research radiometer (PRT-5) modified with a special lens filter system to restrict the viewing range in the infrared spectrum to 10.5 to 12.5 nm. This spectral range approximates the infrared range that is used in the ITOS (NOAA, National Environmental Satellite Service) series weather satellite.

---

[1] uthwest Fisheries Center La Jolla Laboratory, National Marine eries Service, NOAA, La Jolla, CA 92038.

The PRT-5 was piloted by the author in a NMFS twin-engine aircraft over the survey flight track (Fig. 1) at elevations between 152 and 304 m (500 and 1,000 ft). Low stratus bases at 243 and 304 m (800 to 1,000 ft) common to the coastal areas were encountered on most flights during the 3-yr period. On numerous occasions, flights were rescheduled due to very low stratus or fog conditions. Only on rare occasions was there an absence of haze or low stratus, middle and high clouds, the type of conditions that would allow direct comparison of satellite data with the low altitude temperature surveys.

Calibration measurements, or "ground truth," were obtained from surface sources for each flight either from observations taken at the end of the Scripps Institution of Oceanography pier, La Jolla, Calif., or from the U.S. Naval Undersea Center's (NUC) oceanographic tower located approximately 2.8 km (1½ n.mi.) off Mission Beach, San Diego, Calif. Most comparative observations were taken over the oceanographic tower as it is located offshore, and the temperature of surrounding surface waters are relatively stable when compared with those near the outer surf zone at Scripps pier. Simultaneous sea surface temperature observations were made with either a surface bucket thermometer off Scripps pier, or a surface thermistor temperature reading from the NUC oceanographic tower. To obtain a comparative reading, the aircraft was flown over the pier or tower at an elevation of about 45.7 m (150 ft). At the moment the aircraft passed over the pier or tower, the radiative surface of the structures, being much warmer than the sea surface, would produce a response from the infrared detector to make a synchronous mark on the temperature analog recorder chart. The analog recorder chart was driven at a speed of 2.54 cm (1 in) per minute.

The temperature analog chart was keyed to the "ground truth" temperature measurement, and the chart was read to determine a 1-min average temperature, with a slide rule averaging readout device developed by the author (Squire 1971). The 1-min temperature averages were plotted on the flight track, and 1°F (0.56°C) isotherms were contoured from the data. The weekly isotherm charts were given limited distribution to a list of interested fishing and scientific organizations and their personnel.

Isotherm charts are shown in the Appendix for all surveys in 1972, 1973, and 1974 (1972, Figs. 1-28; 1973, Figs. 29-61; 1974, Figs. 62-90). For conversion of °F to °C see comparative temperature data on each figure.

RESULTS

Isotherm charts were developed for each of the 90 survey flights. Distribution of survey flight effort by month for the 3-yr period is as follows:

Month	*Flights*
April	12
May	13
June	10
July	15
August	14
September	12
October	14

June has the least number (10) of flights durin survey period, reflecting the problems of conduc aerial surveys during a period when persistent low stra is most present over the coastal waters off San Di

The general trend of sea surface temperature du the 3-yr period showed that 1973 was cooler than 1 which was an "El Niño" year with above-normal wa ing along the west coast of North and South Am (Miller and Laurs 1975). Temperatures in 1974 warmer than those observed in 1973, but not as warm those experienced in 1972. However, in 1974, anomalous warming period occurred in early Jul southern California, and the highest temperatures recorded at that time. Examples of isotherm patterns served during surveys having the lowest average perature (2 April 1973) and the highest average perature (19 July 1974) are shown in the Appen Figures 31 and 76.

Semimonthly isotherm charts of the northea Pacific, developed from ship data, are issued by NMFS Southwest Fisheries Center. To develop data comparative purposes, weekly temperatures were t averaged by semimonthly periods for each mont through 15 days and 16 through 30/31 days, for the 3 data from temperatures observed at locations along survey flight track, as shown in Figure 1. Isotherm ch in 1°F with °C equivalents drawn to these semimo data are presented in Figures 2 to 15.

The only time series of infrared sea surface tempe ture data available for comparison with the 1972 to data off San Diego is the 1963-68 data resulting fro cooperative program with the U.S. Coast Guard. D these surveys, ground truth calibration checks were a made over the NUC oceanographic tower. Comp 1963-68 monthly average temperatures (to the ne whole °F) for the area off Mission Beach (NUC to area) with those observed in the same location during 1972-74 surveys, we note an average difference of than 1°F (0.56°C). The average temperature for 19 was 63.4°F (17.4°C) and for 1972-74 was 64.1°F (17.8° Average monthly temperatures rounded to the nearest for the 3-yr period were observed (Table 1) to be the for April, warmer 2°F (1.12°C) for May, 3°F (1.68° June, 1°F (0.56°C) for July, the same for August, 1 (0.56°C) less for September, and 2°F (1.12°C) les October.

A general description of sea surface temperature terns that would be typical of those usually observed San Diego during the weekly surveys is as follows: T peratures that are greater than any other locations i survey area are usually found north offshore and to northwest of La Jolla. From off La Jolla Point to Paci Beach and continuing southwest and offshore to southwest is an area of upwelling with generally l temperatures than those to the north. Evidences of t

Table 1.—Comparative temperatures—U.S. Naval Undersea Oceanographic Tower for airborne infrared ea surface temperature surveys, 1963-68/1972-74.

Month	1972-74 monthly mean temperature		1963-68 monthly mean temperature	
	°C	°F	°C	°F
April	14.6	58.2	14.4	58.0
May	16.8	62.3	15.6	60.0
une	18.4	65.3	16.7	62.0
uly	19.7	67.4	18.9	66.0
August	20.0	68.0	20.0	68.0
September	17.3	63.3	18.3	65.0
October	17.3	63.3	18.3	65.0

welling area was also observed when a temperature line, sometimes sharp, was frequently present west of on Beach and the NUC tower when proceeding d the coast. The kelp bed area west of Point Loma pears to be slightly warmer than the area to the north Mission Beach. Near the area south of Point Loma bout the San Diego harbor entrance channel, a sig- nt drop in temperature is usually observed, this ulting from upwelling near the south end of the Point. mperatures tend to remain lower than those found of the Point Loma peninsula and they remain lower southeast of Point Loma, off the Coronado Strand, d increase slightly off Imperial Beach. Immediately of the International Border of Mexico is frequently found the northern edge of an extensive coastal upwelling zone. The effects of this upwelling increase to the south and extend further offshore. Warmer temperatures than those found near the coast of Mexico are encountered offshore about the Coronado Islands, and temperatures in this area are more typical of those found offshore in the northern portion of the survey area.

ACKNOWLEDGMENTS

The interest and cooperation of E. C. LeFond, Dale Good, Paul Hansen, and the staff associated with the NUC oceanographic tower in making sea surface calibration observations is appreciated. To a number of personnel from the Southwest Fisheries Center, NMFS, NOAA, and to Clyde Melendy of the National Weather Service, NOAA, who took time from their activities to assist in the airborne surveys, I express my appreciation.

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SQUIRE, J. L., Jr.
1971. Measurements of sea surface temperature on the eastern Pacific continental shelf using airborne infrared radiometry, August 1963-July 1968. U.S. Coast Guard Oceanogr. Rep. 47 (CG373-47), 229 p.

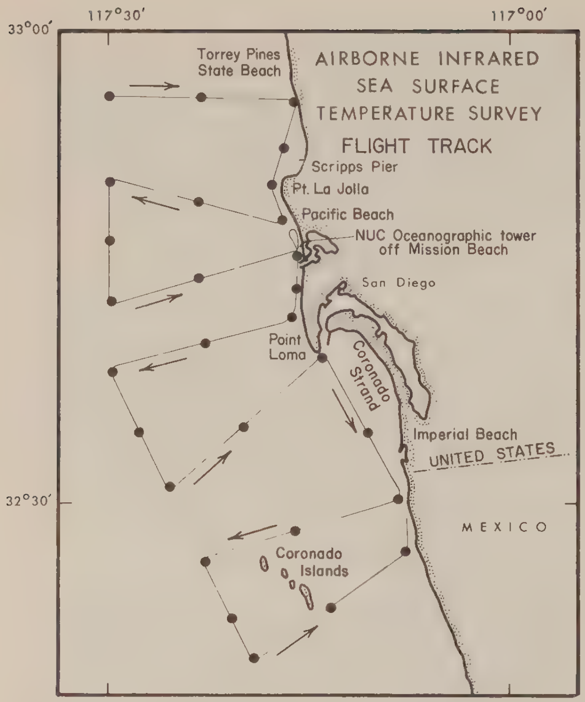

117°30′
117°00′
33°00′
32°30′
Torrey Pines
State Beach
AIRBORNE INFRARED
SEA SURFACE
TEMPERATURE SURVEY
FLIGHT TRACK
Scripps Pier
Pt. La Jolla
Pacific Beach
NUC Oceanographic tower
off Mission Beach
San Diego
Point
Loma
Coronado
Strand
Imperial Beach
UNITED STATES
MEXICO
Coronado
Islands

Figure 1.—Survey flight track pattern flown during the 3-yr study. Dots indicate points where temperatures were taken for the development of biweekly average isotherm charts.

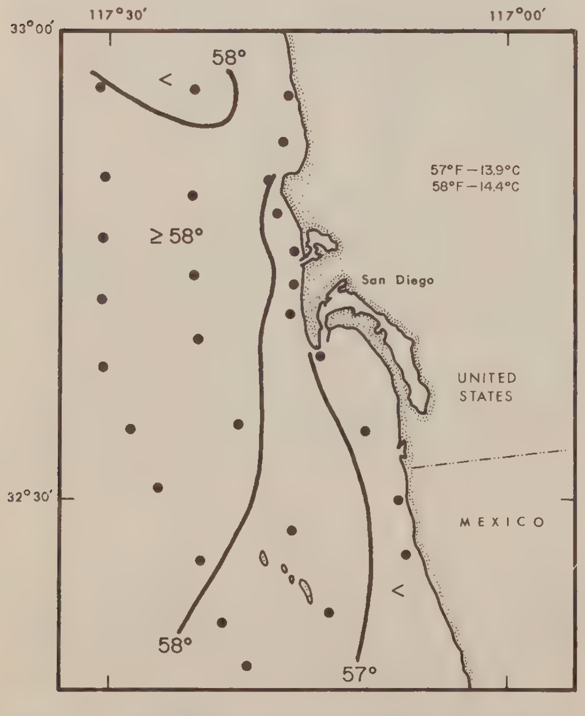

117°30′
117°00′
33°00′
32°30′
58°
<
57°F — 13.9°C
58°F — 14.4°C
≥ 58°
San Diego
UNITED
STATES
MEXICO
<
58°
57°

Figure 2.—Average isotherm patterns observed off San Diego in °F with °C equivalents for the 3-yr period, 1 to 15 April 1972-74.

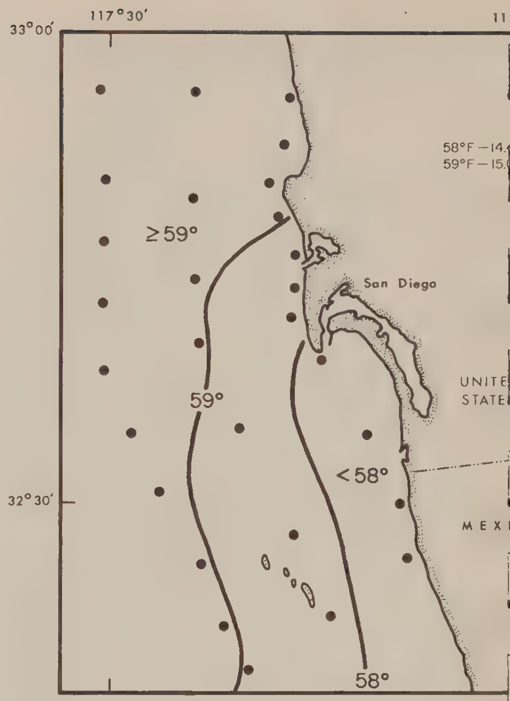

117°30′
33°00′
32°30′
58°F — 14.
59°F — 15.
≥ 59°
San Diego
59°
UNITE
STATE
< 58°
MEXI
58°

Figure 3.—Average isotherm patterns observed off San Dieg with °C equivalents for the 3-yr period, 16 to 30 April 19

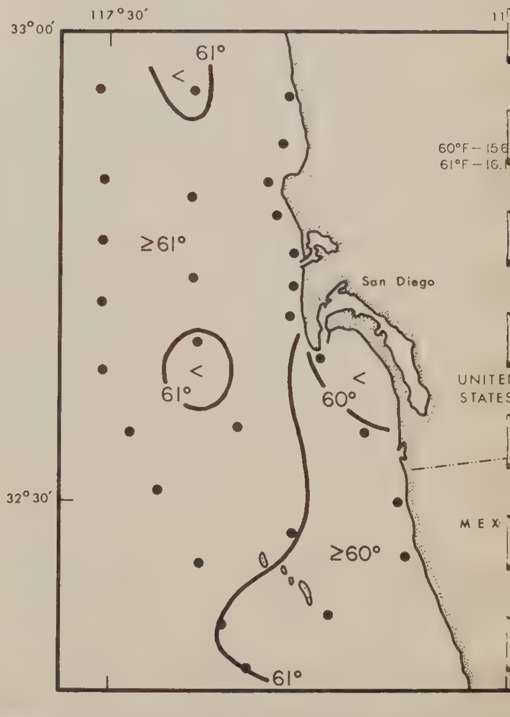
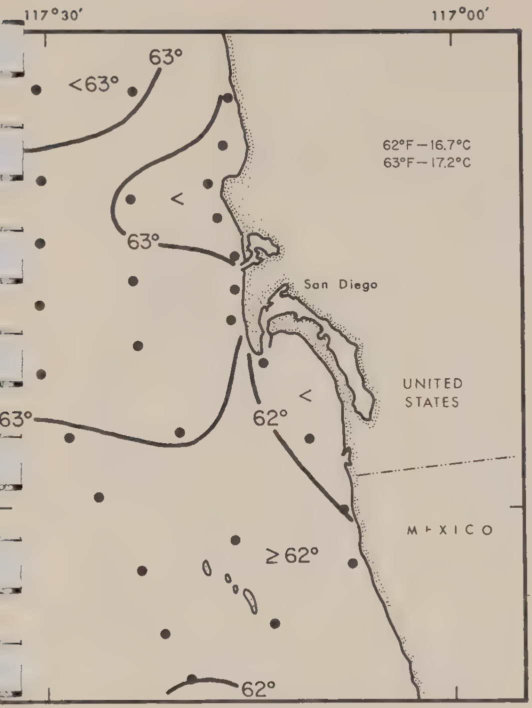

117°30′
33°00′
32°30′
61°
<
60°F — 156
61°F — 16.
≥ 61°
San Diego
<
61°
<
60°
UNITED
STATES
MEX
≥ 60°
61°

Figure 4.—Average isotherm patterns observed off San Die with °C equivalents for the 3-yr period, 1 to 15 May 197


117°30′
117°00′
63°
<63°
62°F — 16.7°C
63°F — 17.2°C
<
63°
San Diego
UNITED STATES
63°
62°
<
MEXICO
≥62°
62°

.—Average isotherm patterns observed off San Diego in °F °C equivalents for the 3-yr period, 16 to 31 May 1972-74.

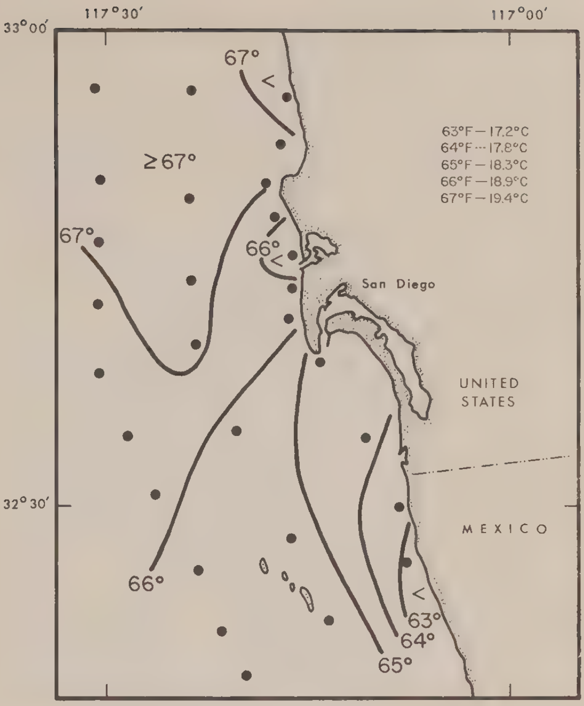
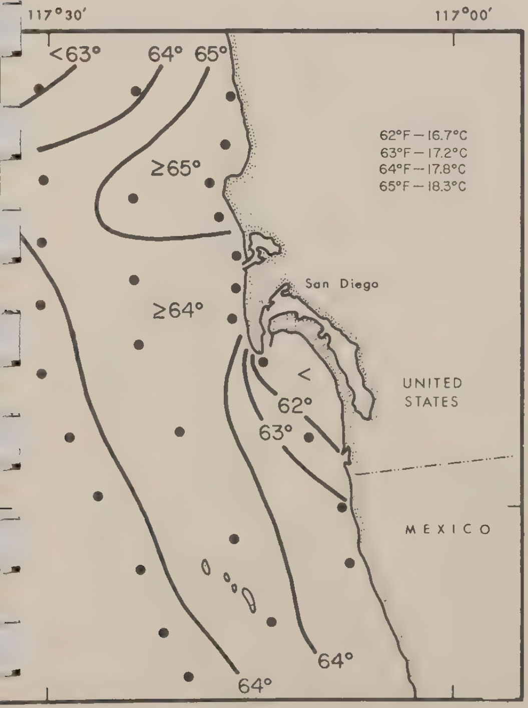

33°00′
117°30′
117°00′
67°
<
63°F — 17.2°C
64°F — 17.8°C
65°F — 18.3°C
66°F — 18.9°C
67°F — 19.4°C
≥67°
67°
66°
<
San Diego
UNITED STATES
32°30′
MEXICO
66°
<
63°
64°
65°

Figure 7.—Average isotherm patterns observed off San Diego in °F with °C equivalents for the 3-yr period, 16 to 30 June 1972-74.


117°30′
117°00′
<63°
64°
65°
62°F — 16.7°C
63°F — 17.2°C
64°F — 17.8°C
65°F — 18.3°C
≥65°
San Diego
≥64°
<
UNITED STATES
62°
63°
MEXICO
64°
64°

—Average isotherm patterns observed off San Diego in °F °C equivalents for the 3-yr period, 1 to 15 June 1972-74.

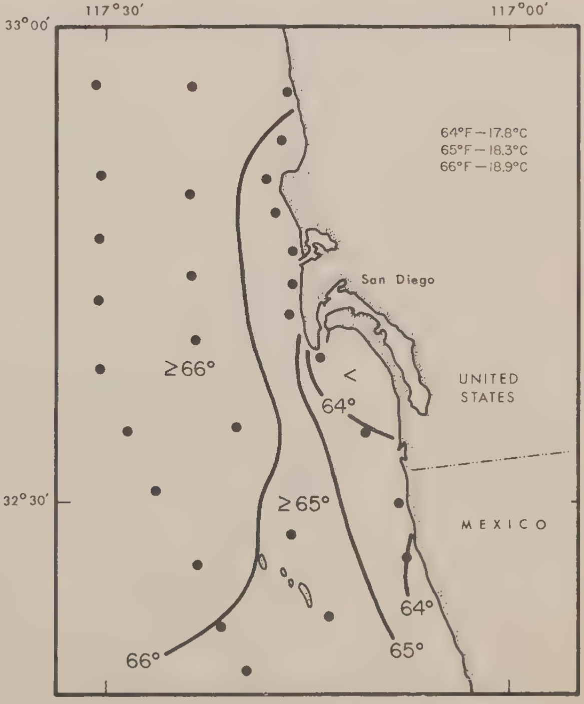

33°00′
117°30′
117°00′
64°F — 17.8°C
65°F — 18.3°C
66°F — 18.9°C
San Diego
≥66°
<
UNITED STATES
64°
32°30′
≥65°
MEXICO
64°
65°
66°

Figure 8.—Average isotherm patterns observed off San Diego in °F with °C equivalents for the 3-yr period, 1 to 15 July 1972-74.

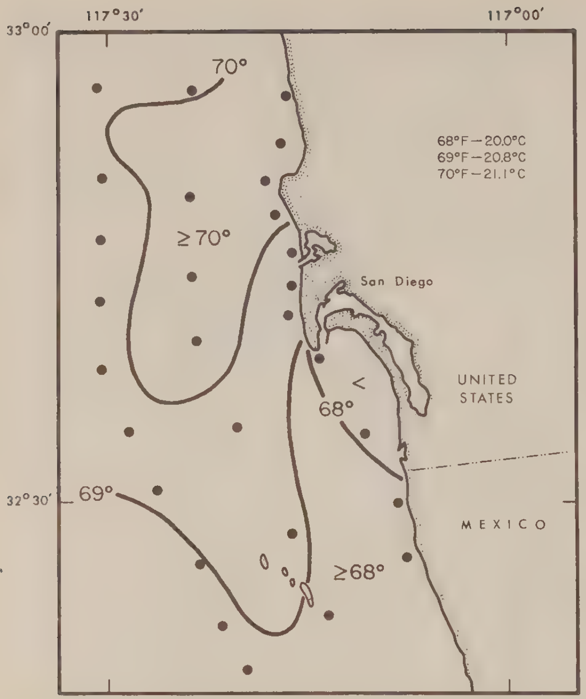

117°30′
117°00′
33°00′
32°30′
70°
≥70°
69°
68°
<
≥68°
68°F — 20.0°C
69°F — 20.8°C
70°F — 21.1°C
San Diego
UNITED STATES
MEXICO

Figure 9.—Average isotherm patterns observed off San Diego in °F with °C equivalents for the 3-yr period, 16 to 31 July 1972-74.

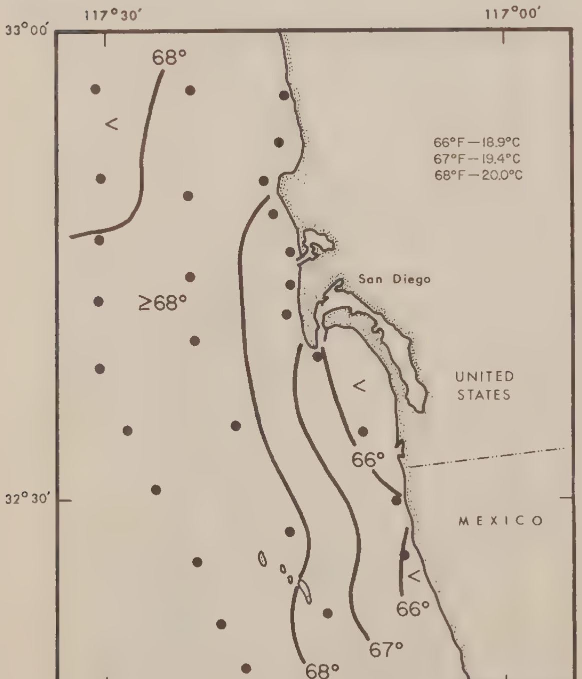

117°30′
117°00′
33°00′
32°30′
68°
<
≥68°
<
66°
<
66°
67°
68°
66°F — 18.9°C
67°F — 19.4°C
68°F — 20.0°C
San Diego
UNITED STATES
MEXICO

Figure 10.—Average isotherm patterns observed off San Diego in °F with °C equivalents for the 3-yr period, 1 to 15 August 1972-74.

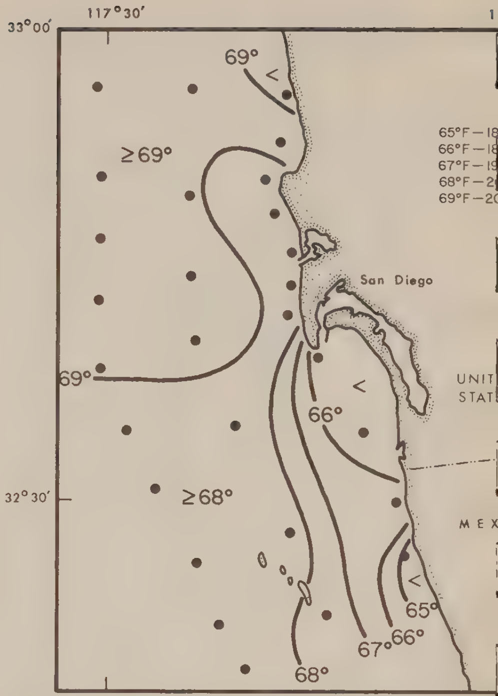

117°30′
33°00′
32°30′
69°
<
≥69°
69°
≥68°
<
66°
<
65°
66°
67°
68°
65°F — 18
66°F — 18
67°F — 19
68°F — 2
69°F — 20
San Diego
UNIT
STAT
MEX

Figure 11.—Average isotherm patterns observed off San D
with °C equivalents for the 3-yr period, 16 to 31 August

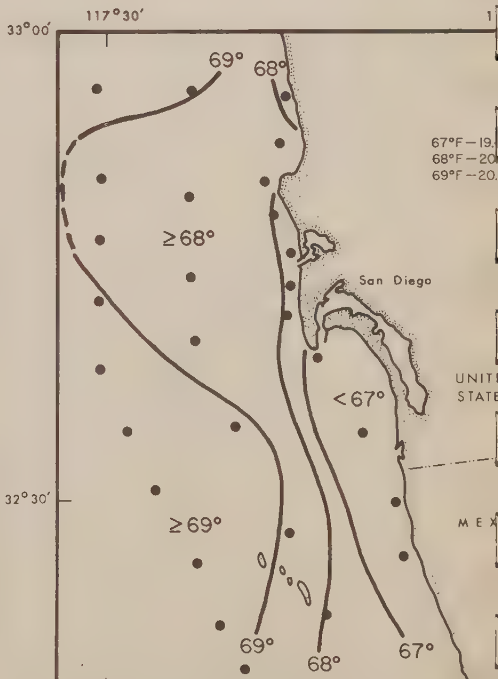
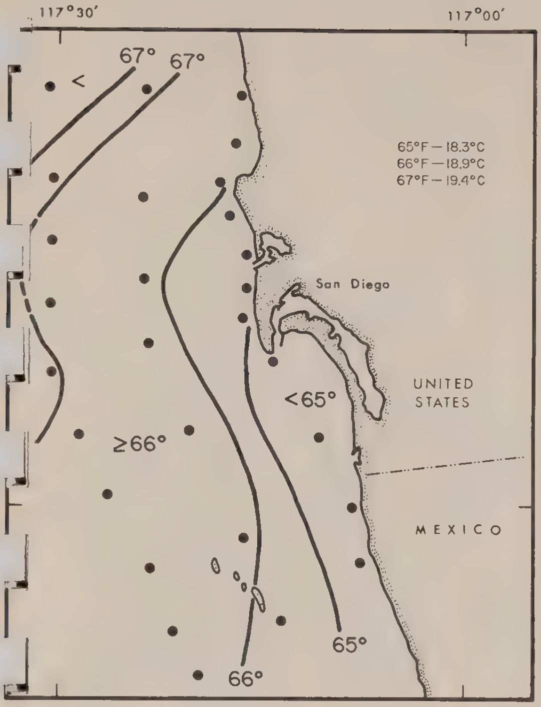

117°30′
33°00′
32°30′
69°
68°
≥68°
<67°
≥69°
69°
68°
67°
67°F — 19.
68°F — 20
69°F — 20.
San Diego
UNIT
STATE
MEX

Figure 12.—Average isotherm patterns observed off San D
with °C equivalents for the 3-yr period, 1 to 15 Septembe


117°30′
117°00′
67°
67°
<
65°F — 18.3°C
66°F — 18.9°C
67°F — 19.4°C
San Diego
UNITED STATES
<65°
≥66°
MEXICO
65°
66°

3.—Average isotherm patterns observed off San Diego in °F equivalents for the 3-yr period, 16 to 30 Septembver 1972-74.

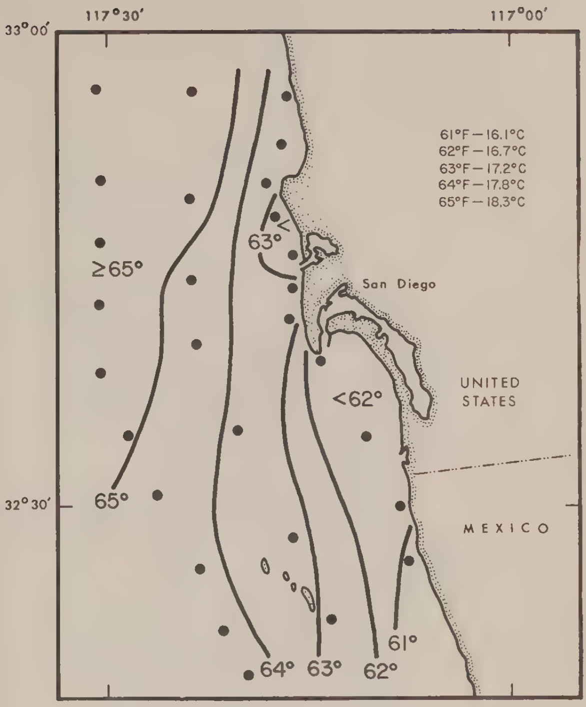
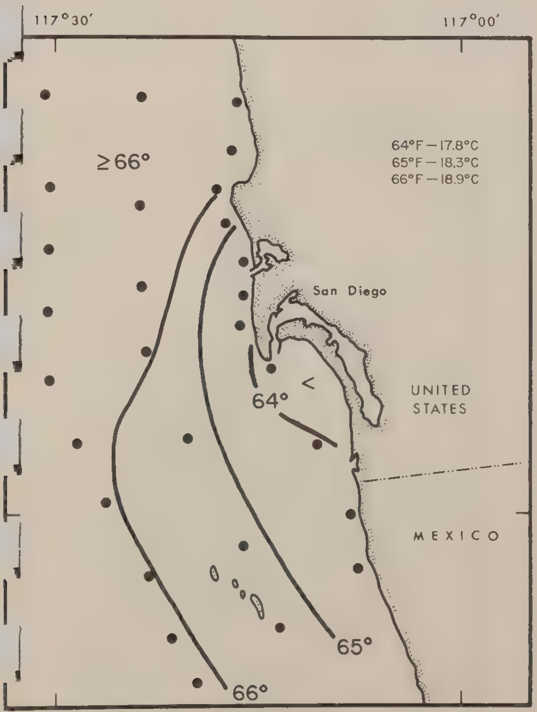

33°00′
117°30′
117°00′
61°F — 16.1°C
62°F — 16.7°C
63°F — 17.2°C
64°F — 17.8°C
65°F — 18.3°C
≥65°
63°
<
San Diego
UNITED STATES
<62°
32°30′
65°
MEXICO
61°
64°
63°
62°

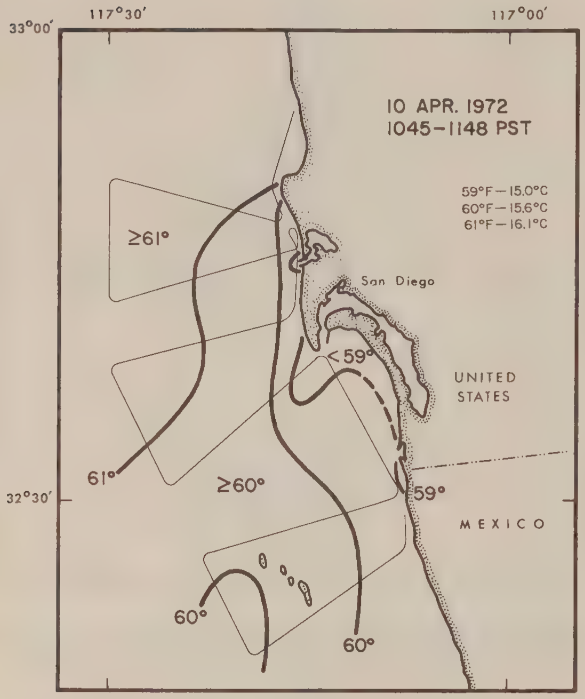
Figure 15.—Average isotherm patterns observed off San Diego in °F with °C equivalents for the 3-yr period, 16 to 31 October 1972-74.

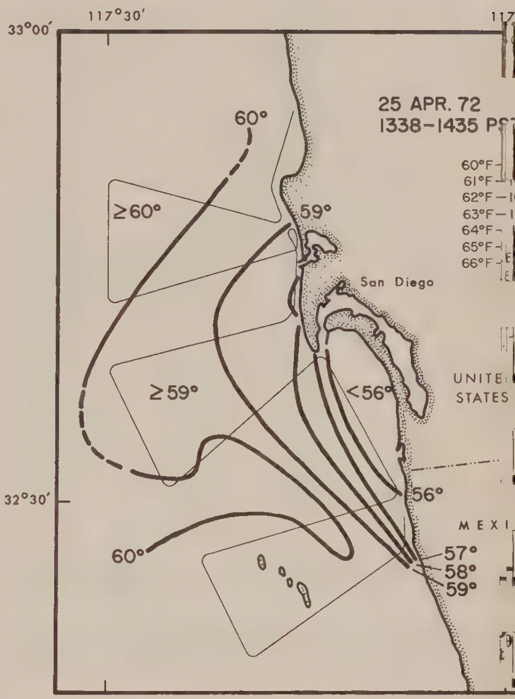

117°30′
117°00′
≥66°
64°F — 17.8°C
65°F — 18.3°C
66°F — 18.9°C
San Diego
UNITED STATES
<
64°
MEXICO
65°
66°

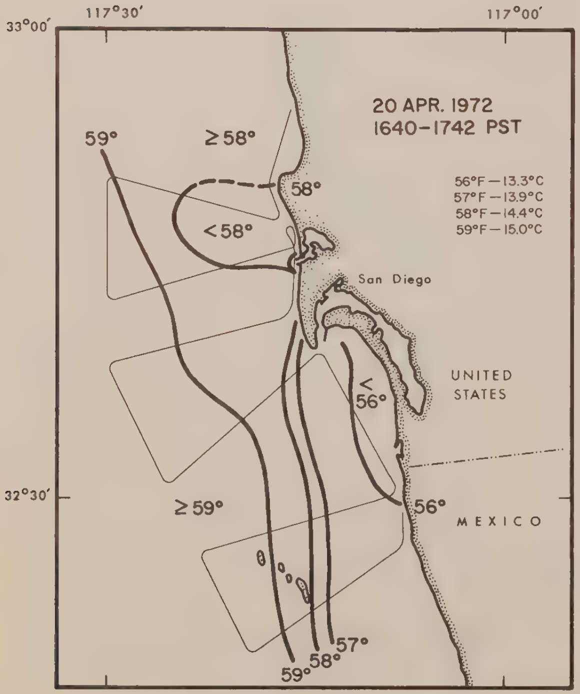
4.—Average isotherm patterns observed off San Diego in °F C equivalents for the 3-yr period, 1 to 15 October 1972-74.

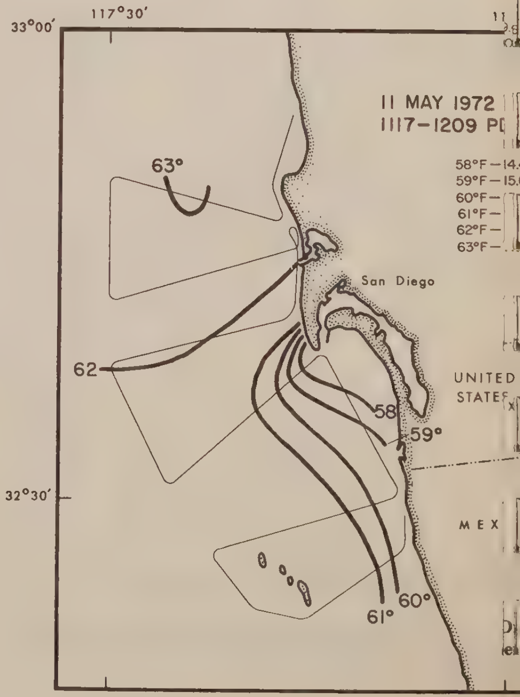
APPENDIX

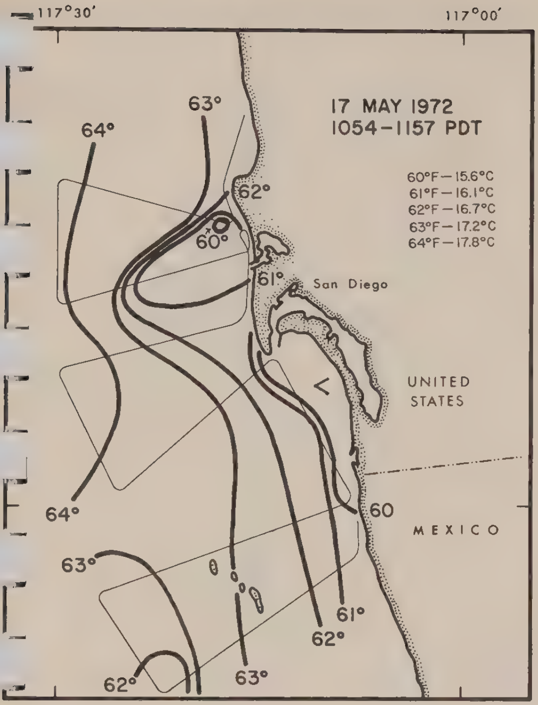
Sea surface temperature isotherms observed during survey flights off San Diego. Figure 1 to 90.

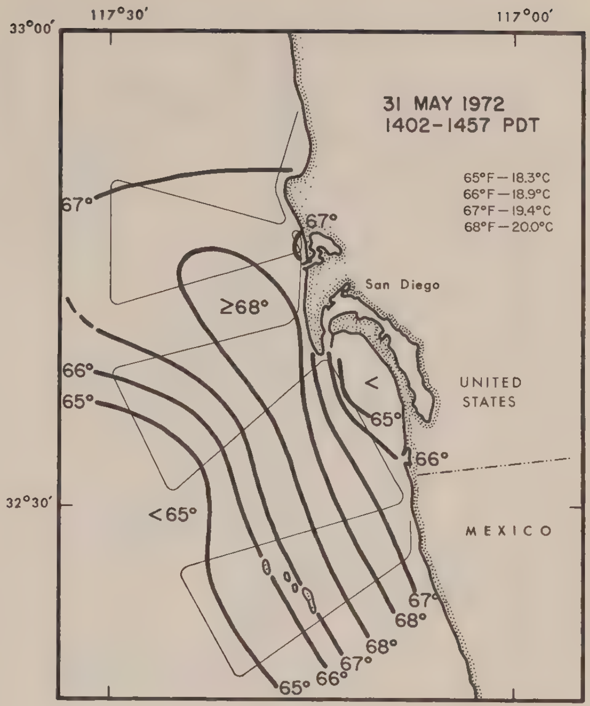

33°00′
117°30′
117°00′
10 APR. 1972
1045–1148 PST
59°F — 15.0°C
60°F — 15.6°C
61°F — 16.1°C
≥61°
San Diego
<59°
UNITED
STATES
61°
≥60°
59°
32°30′
MEXICO
60°
60°

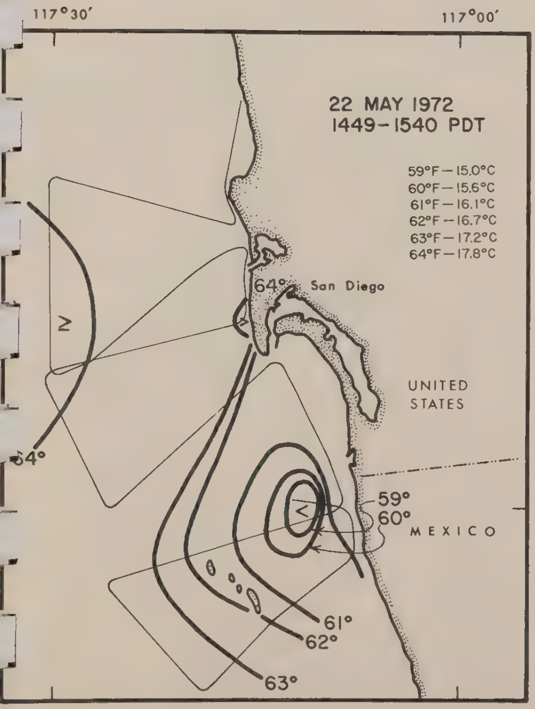

33°00′
117°30′
25 APR. 72
1338–1435 PS
60°
60°F –
61°F –
62°F –
63°F –
64°F –
65°F –
66°F –
≥60°
59°
San Diego
≥59°
<56°
UNITE
STATES
56°
32°30′
MEXI
60°
57°
58°
59°

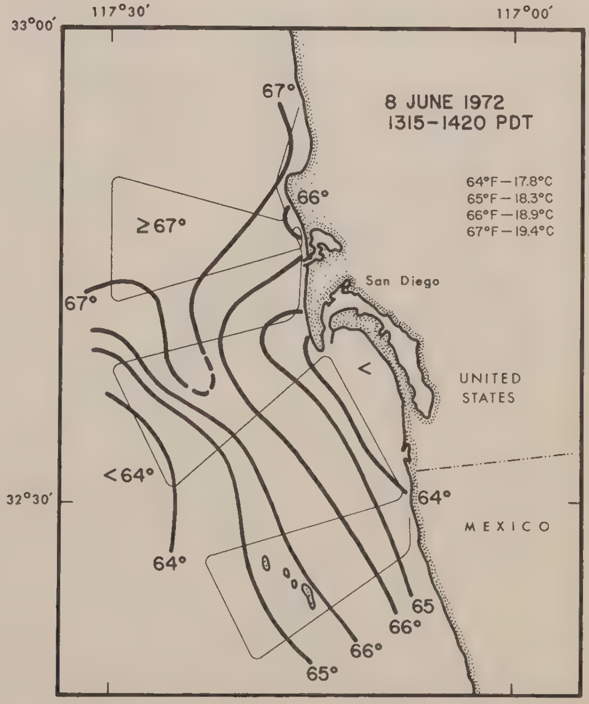

33°00′
117°30′
117°00′
20 APR. 1972
1640–1742 PST
59°
≥58°
58°
56°F — 13.3°C
57°F — 13.9°C
58°F — 14.4°C
59°F — 15.0°C
<58°
San Diego
<56°
UNITED
STATES
32°30′
≥59°
56°
MEXICO
57°
58°
59°

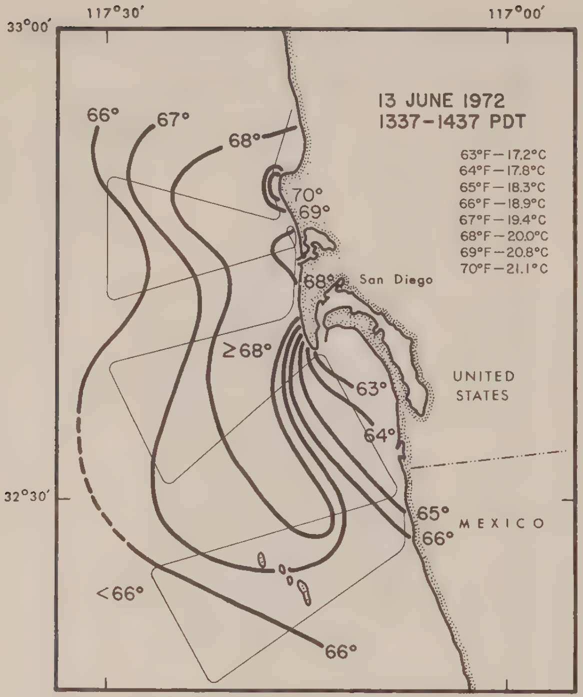

33°00′
117°30′
11 MAY 1972
1117–1209 P
63°
58°F — 14.
59°F — 15.
60°F —
61°F —
62°F —
63°F —
San Diego
62
UNITED
STATES
58°
59°
32°30′
MEX
60°
61°

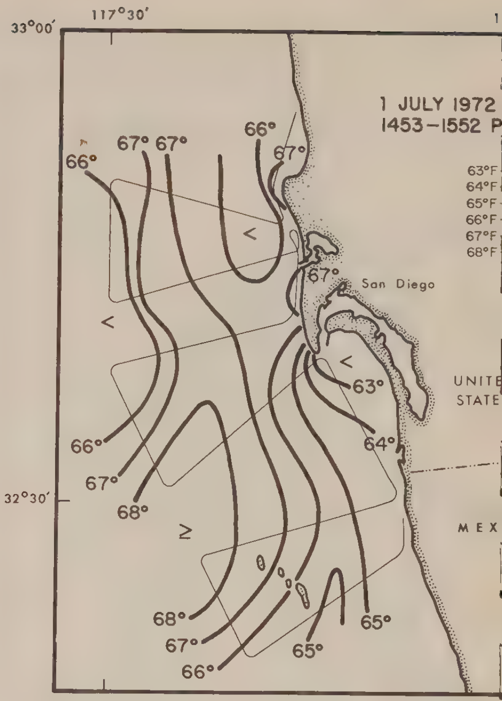

117°30′
117°00′
17 MAY 1972
1054–1157 PDT
60°F – 15.6°C
61°F – 16.1°C
62°F – 16.7°C
63°F – 17.2°C
64°F – 17.8°C
63°
64°
62°
60°
61°
San Diego
UNITED STATES
MEXICO
60
64°
63°
61°
62°
63°
62°

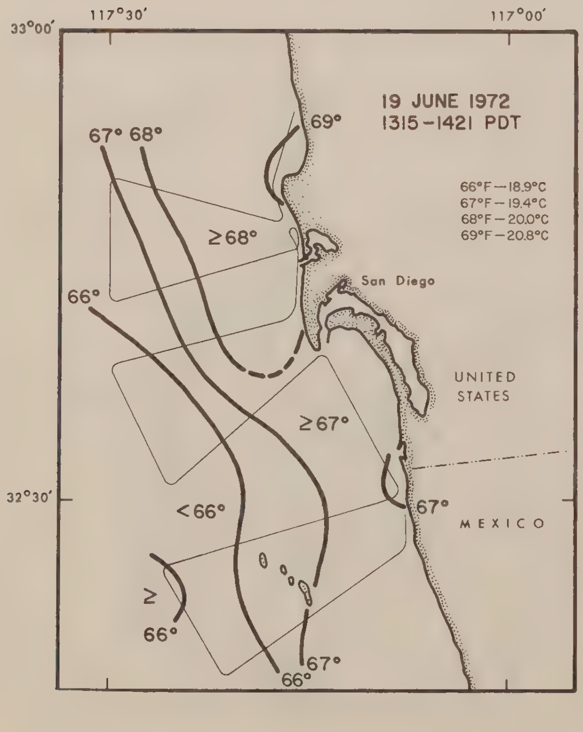

33°00′
117°30′
117°00′
31 MAY 1972
1402–1457 PDT
65°F – 18.3°C
66°F – 18.9°C
67°F – 19.4°C
68°F – 20.0°C
67°
67°
San Diego
≥68°
66°
65°
UNITED STATES
65°
66°
32°30′
<65°
MEXICO
67°
68°
68°
67°
65°
66°

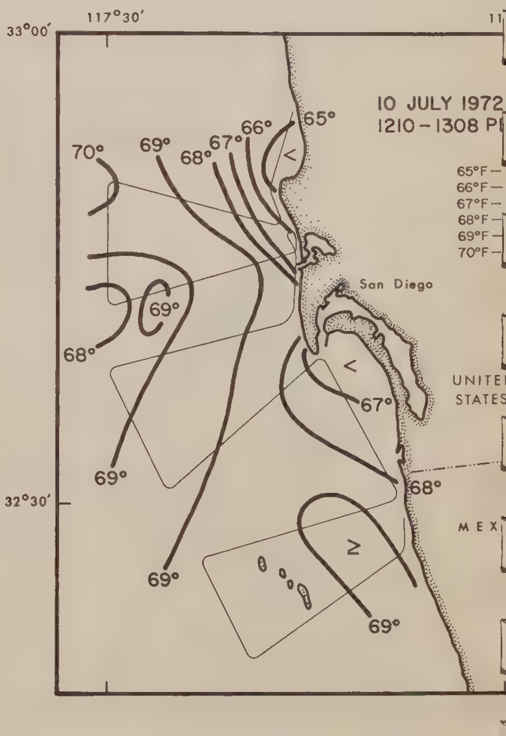

117°30′
117°00′
22 MAY 1972
1449–1540 PDT
59°F – 15.0°C
60°F – 15.6°C
61°F – 16.1°C
62°F – 16.7°C
63°F – 17.2°C
64°F – 17.8°C
64°
San Diego
≥
UNITED STATES
4°
59°
60°
MEXICO
61°
62°
63°

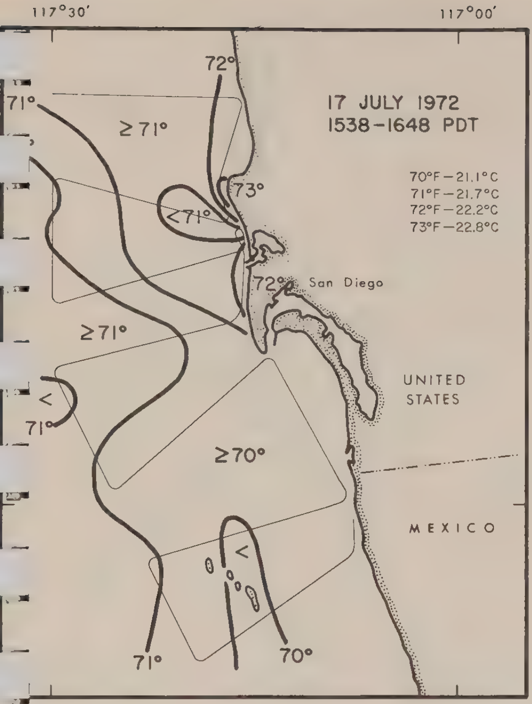

33°00′
117°30′
117°00′
67°
8 JUNE 1972
1315–1420 PDT
64°F – 17.8°C
65°F – 18.3°C
66°F – 18.9°C
67°F – 19.4°C
66°
≥67°
San Diego
67°
UNITED STATES
<64°
32°30′
64°
MEXICO
64°
65
66°
66°
65°

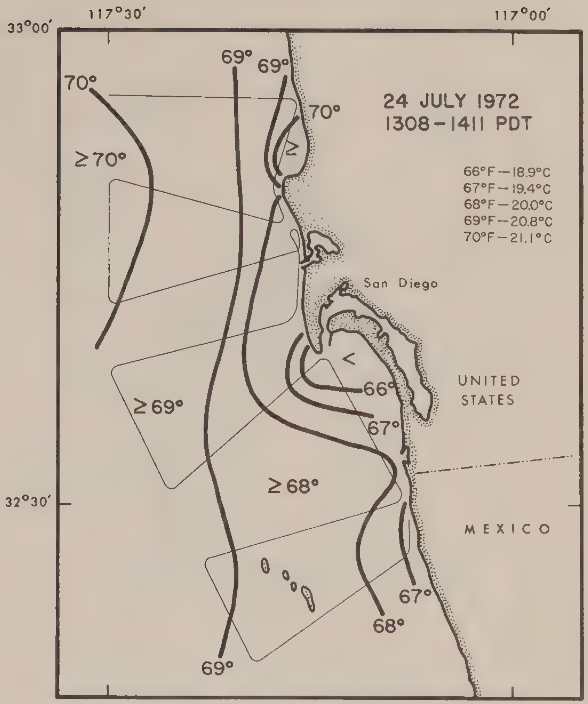

117°30′
117°00′
33°00′
32°30′
13 JUNE 1972
1337–1437 PDT
63°F—17.2°C
64°F—17.8°C
65°F—18.3°C
66°F—18.9°C
67°F—19.4°C
68°F—20.0°C
69°F—20.8°C
70°F—21.1°C
66°
67°
68°
70°
69°
68°
San Diego
≥68°
63°
64°
UNITED
STATES
65°
66°
MEXICO
<66°
66°

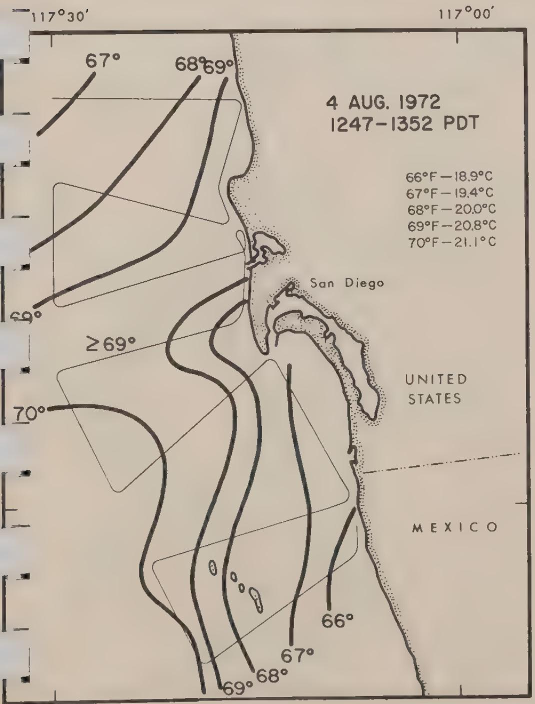

117°30′
33°00′
32°30′
1 JULY 1972
1453–1552 P
63°F
64°F
65°F
66°F
67°F
68°F
66°
67° 67°
66°
67°
<
67°
San Diego
<
<
63°
UNITE
STATE
66°
67°
68°
64°
MEX
≥
68°
67°
66°
65°
65°

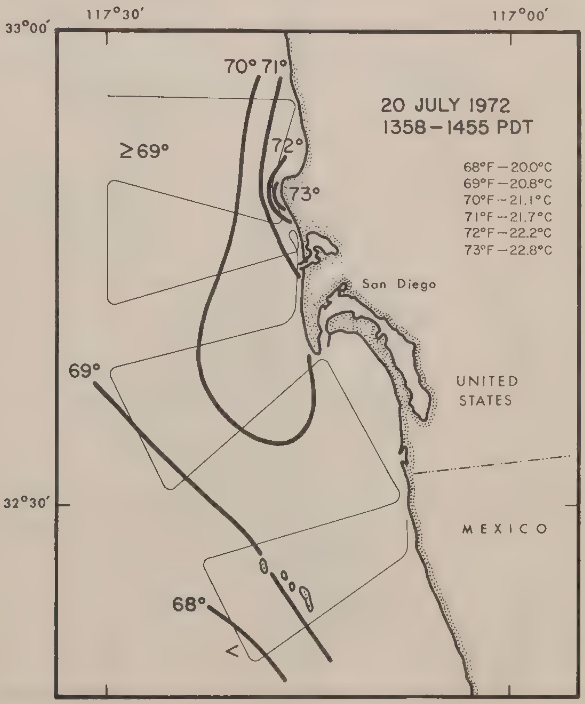

117°30′
117°00′
33°00′
32°30′
19 JUNE 1972
1315–1421 PDT
66°F—18.9°C
67°F—19.4°C
68°F—20.0°C
69°F—20.8°C
67° 68°
69°
≥68°
San Diego
66°
UNITED
STATES
≥67°
<66°
67°
MEXICO
≥
66°
67°
66°

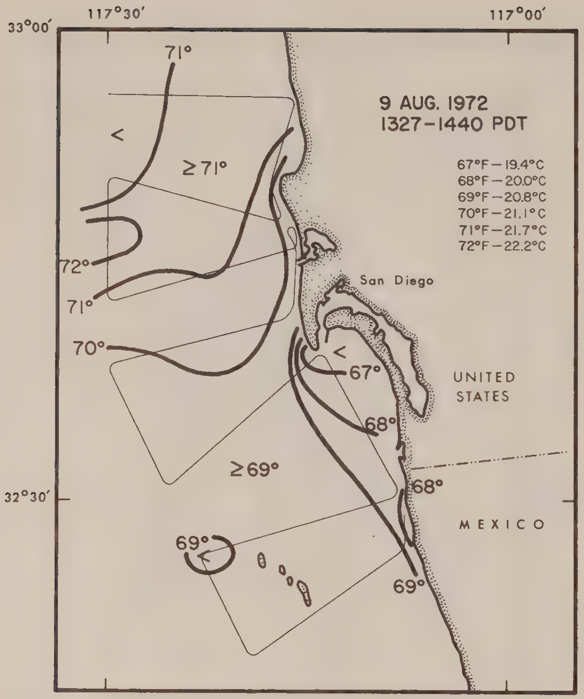

117°30′
11
33°00′
32°30′
10 JULY 1972
1210–1308 P
65°F
66°F
67°F
68°F
69°F
70°F
70°
69°
68°
67°
66°
65°
<
San Diego
69°
68°
<
UNITE
STATES
67°
69°
68°
MEX
≥
69°
69°

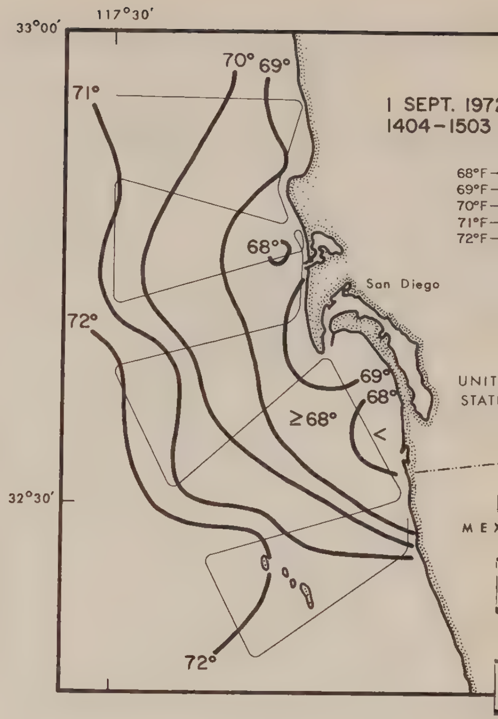

117°30′
117°00′
17 JULY 1972
1538-1648 PDT
70°F—21.1°C
71°F—21.7°C
72°F—22.2°C
73°F—22.8°C
72°
71°
≥71°
73°
<71°
72°
San Diego
≥71°
<
71°
UNITED STATES
≥70°
MEXICO
<
71°
70°

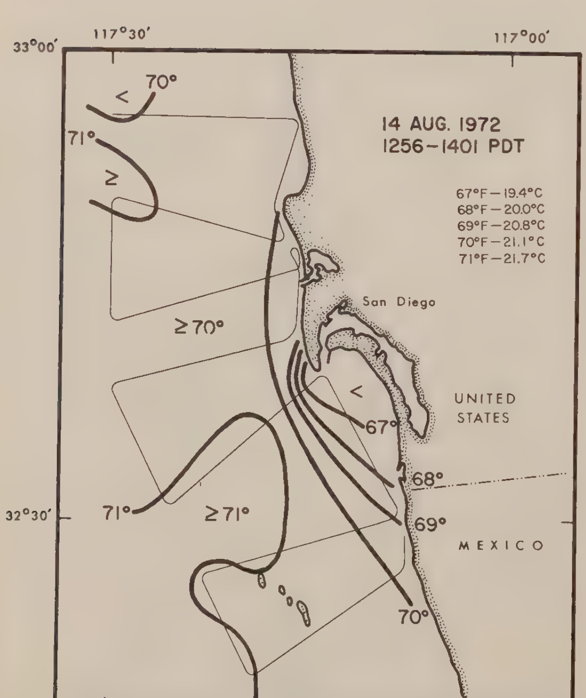

33°00′
117°30′
117°00′
24 JULY 1972
1308-1411 PDT
66°F—18.9°C
67°F—19.4°C
68°F—20.0°C
69°F—20.8°C
70°F—21.1°C
69°
69°
70°
70°
≥
≥70°
San Diego
<
66°
67°
≥69°
UNITED STATES
≥68°
32°30′
MEXICO
67°
68°
69°

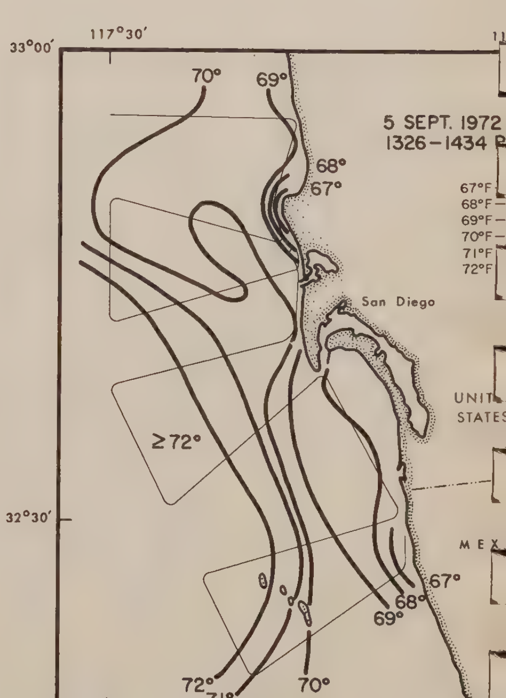

117°30′
117°00′
4 AUG. 1972
1247-1352 PDT
66°F—18.9°C
67°F—19.4°C
68°F—20.0°C
69°F—20.8°C
70°F—21.1°C
67°
68°
69°
69°
San Diego
≥69°
70°
UNITED STATES
MEXICO
66°
67°
69°
68°

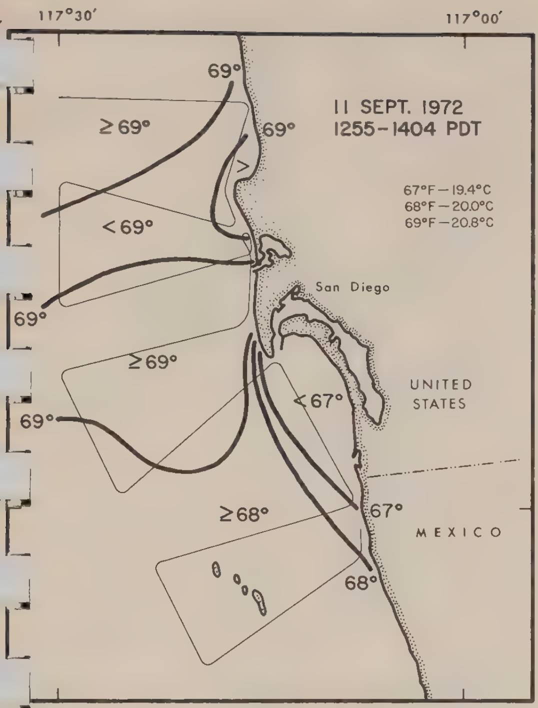

33°00′
117°30′
117°00′
20 JULY 1972
1358-1455 PDT
68°F—20.0°C
69°F—20.8°C
70°F—21.1°C
71°F—21.7°C
72°F—22.2°C
73°F—22.8°C
70°
71°
≥69°
72°
73°
San Diego
69°
UNITED STATES
32°30′
MEXICO
68°
<

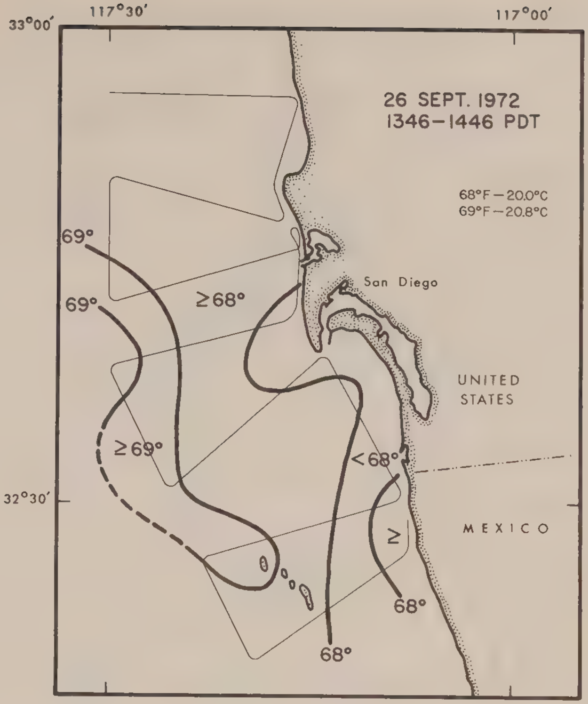

33°00′
117°30′
117°00′
32°30′
9 AUG. 1972
1327–1440 PDT
67°F – 19.4°C
68°F – 20.0°C
69°F – 20.8°C
70°F – 21.1°C
71°F – 21.7°C
72°F – 22.2°C
71°
<
≥71°
72°
71°
70°
San Diego
<
67°
68°
UNITED
STATES
≥69°
68°
69°
MEXICO
69°

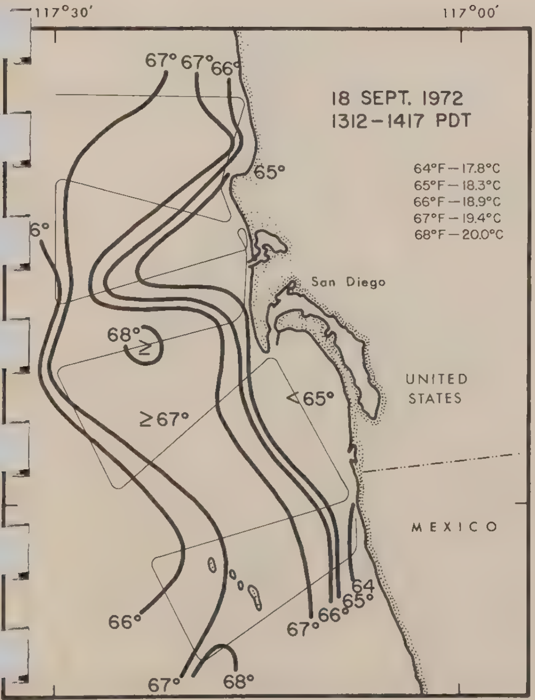

33°00′
117°30′
32°30′
1 SEPT. 197
1404–1503
68°F –
69°F –
70°F –
71°F –
72°F –
70°
69°
71°
68°
San Diego
72°
69°
68°
≥68°
<
UNIT
STAT
ME
72°

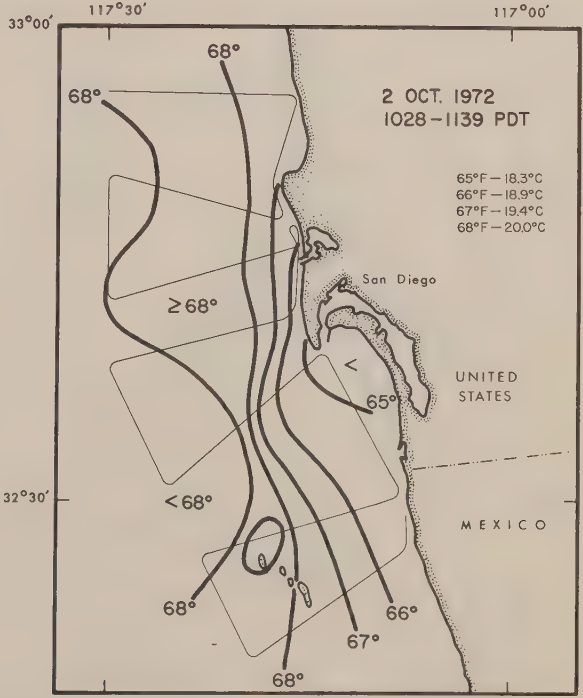

33°00′
117°30′
117°00′
32°30′
14 AUG. 1972
1256–1401 PDT
67°F – 19.4°C
68°F – 20.0°C
69°F – 20.8°C
70°F – 21.1°C
71°F – 21.7°C
70°
<
71°
≥
San Diego
≥70°
<
UNITED
STATES
67°
68°
71°
≥71°
69°
MEXICO
70°

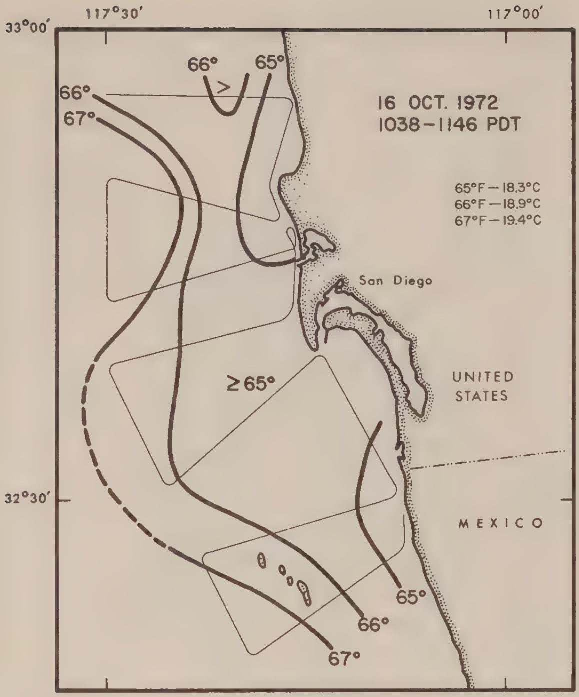

33°00′
117°30′
32°30′
5 SEPT. 1972
1326–1434
67°F
68°F –
69°F –
70°F –
71°F
72°F
70°
69°
68°
67°
San Diego
≥72°
UNIT
STATES
ME
67°
68°
69°
72°
71°
70°

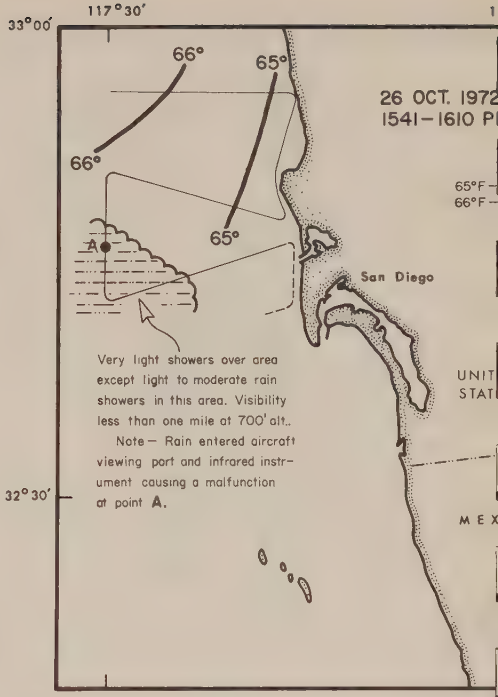

117°30′
117°00′
11 SEPT. 1972
1255–1404 PDT
67°F – 19.4°C
68°F – 20.0°C
69°F – 20.8°C
69°
≥ 69°
69°
>
< 69°
69°
San Diego
≥ 69°
UNITED STATES
< 67°
69°
≥ 68°
67°
MEXICO
68°


33°00′
117°30′
117°00′
26 SEPT. 1972
1346–1446 PDT
68°F – 20.0°C
69°F – 20.8°C
69°
San Diego
69°
≥ 68°
UNITED STATES
≥ 69°
< 68°
32°30′
MEXICO
≥
68°
68°


117°30′
117°00′
67° 67° 66°
18 SEPT. 1972
1312–1417 PDT
65°
64°F – 17.8°C
65°F – 18.3°C
66°F – 18.9°C
67°F – 19.4°C
68°F – 20.0°C
6°
San Diego
68°
≥
≥ 67°
< 65°
UNITED STATES
MEXICO
64
65°
66°
67°
66°
67°
68°

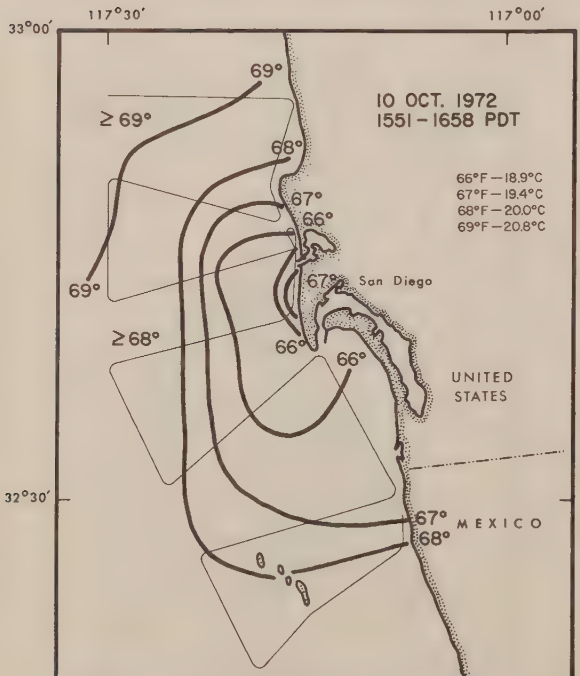

33°00′
117°30′
117°00′
68°
68°
2 OCT. 1972
1028–1139 PDT
65°F – 18.3°C
66°F – 18.9°C
67°F – 19.4°C
68°F – 20.0°C
San Diego
≥ 68°
<
65°
UNITED STATES
32°30′
< 68°
MEXICO
68°
66°
67°
68°

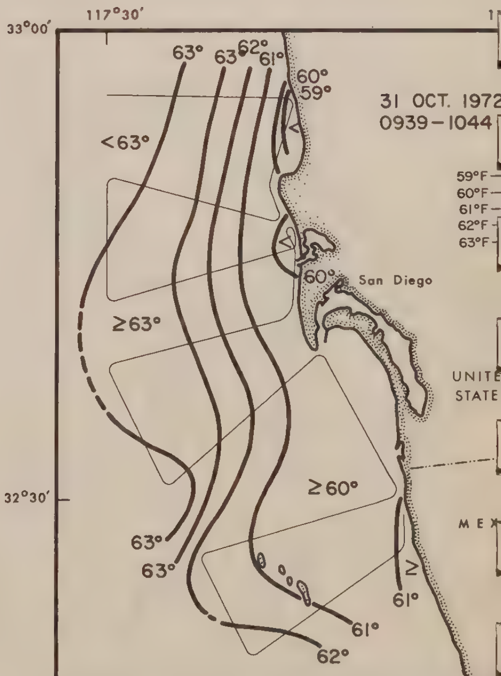

33°00′
117°30′
117°00′
16 OCT. 1972
1038–1146 PDT
65°F — 18.3°C
66°F — 18.9°C
67°F — 19.4°C
66°
65°
66°
67°
>
San Diego
≥65°
UNITED STATES
MEXICO
32°30′
65°
66°
67°

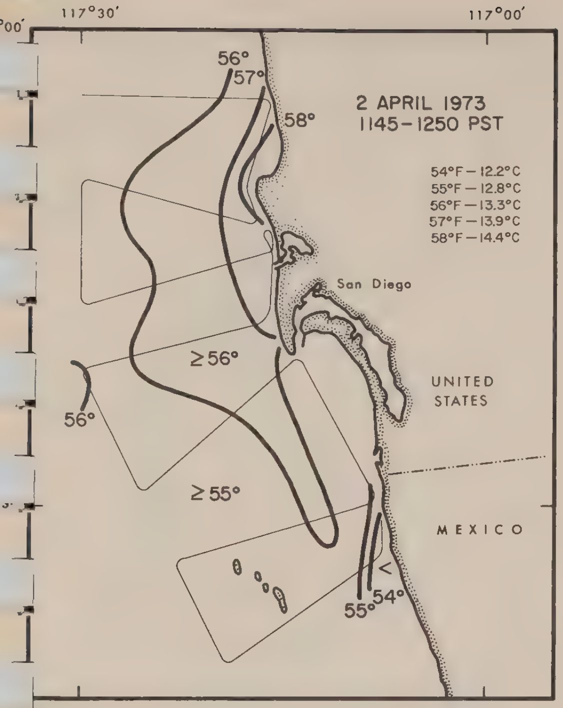

33°00′
117°30′
26 OCT. 1972
1541–1610 P
65°F –
66°F –
66°
65°
66°
65°
A
San Diego
UNIT
STAT
32°30′
M E X

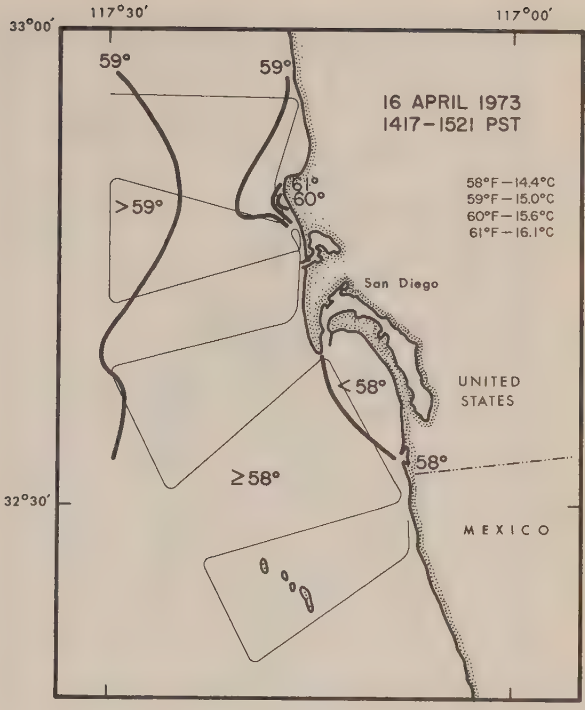
Very light showers over area except light to moderate rain showers in this area. Visibility less than one mile at 700′ alt..

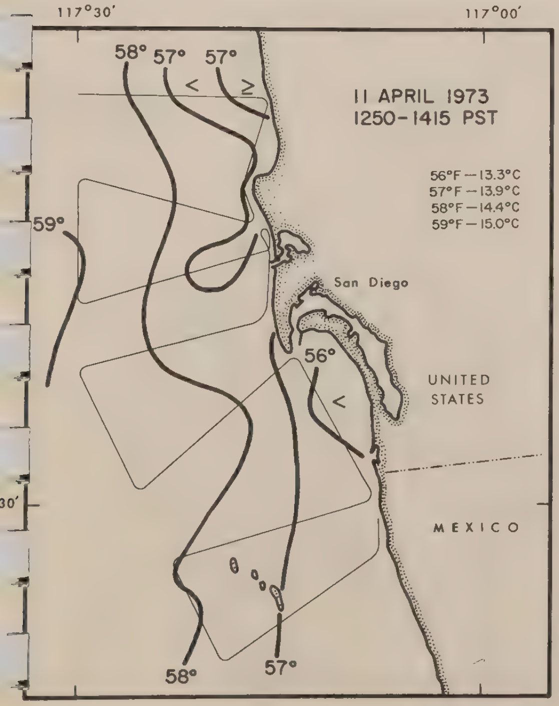
Note — Rain entered aircraft viewing port and infrared instrument causing a malfunction at point **A.**

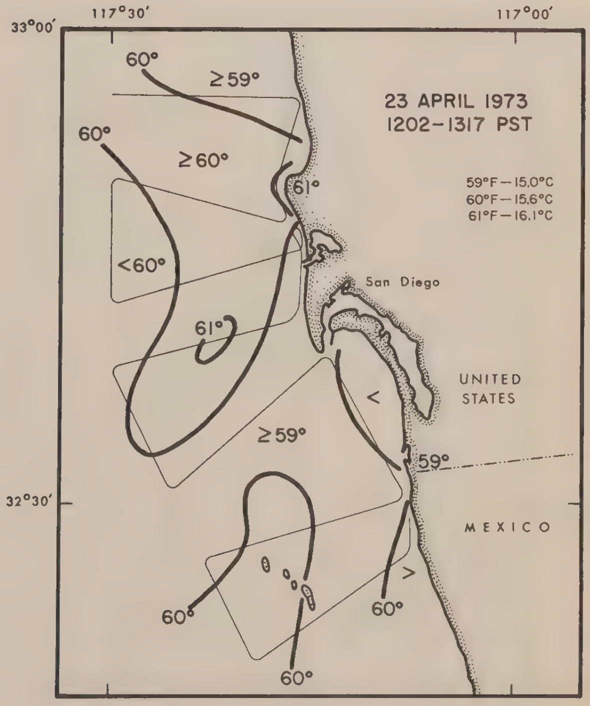

33°00′
117°30′
117°00′
10 OCT. 1972
1551–1658 PDT
66°F — 18.9°C
67°F — 19.4°C
68°F — 20.0°C
69°F — 20.8°C
69°
≥69°
68°
67°
66°
69°
67°
San Diego
≥68°
66°
66°
UNITED STATES
32°30′
67°
68°
MEXICO

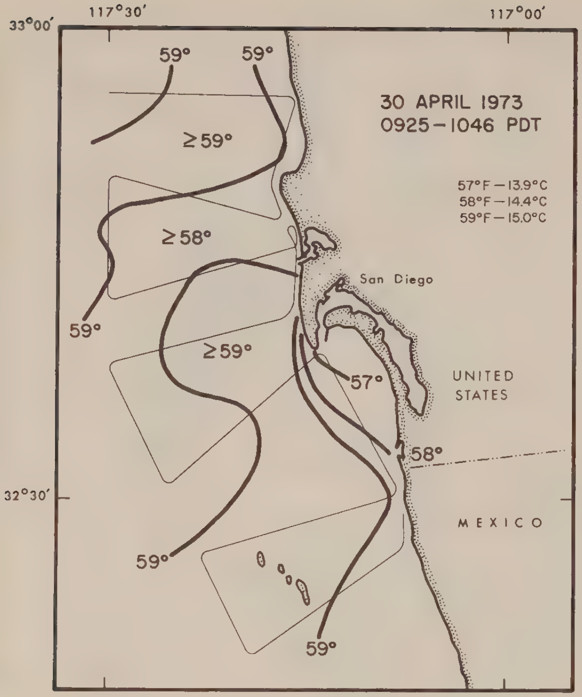

33°00′
117°30′
31 OCT. 1972
0939–1044
59°F –
60°F –
61°F –
62°F –
63°F –
63°
63°
62°
61°
60°
59°
<63°
<
<
60°
San Diego
≥63°
UNITE
STATE
≥60°
32°30′
MEX
63°
63°
≥
61°
61°
62°


117°30′
117°00′
2 APRIL 1973
1145-1250 PST
54°F — 12.2°C
55°F — 12.8°C
56°F — 13.3°C
57°F — 13.9°C
58°F — 14.4°C
56°
57°
58°
≥ 56°
56°
≥ 55°
<
55°
54°
San Diego
UNITED STATES
MEXICO


33°00′
117°30′
117°00′
16 APRIL 1973
1417-1521 PST
58°F — 14.4°C
59°F — 15.0°C
60°F — 15.6°C
61°F — 16.1°C
59°
59°
61°
60°
> 59°
< 58°
58°
≥ 58°
32°30′
San Diego
UNITED STATES
MEXICO


117°30′
117°00′
11 APRIL 1973
1250-1415 PST
56°F — 13.3°C
57°F — 13.9°C
58°F — 14.4°C
59°F — 15.0°C
58°
57°
57°
<
≥
59°
56°
<
58°
57°
30′
San Diego
UNITED STATES
MEXICO


33°00′
117°30′
117°00′
23 APRIL 1973
1202-1317 PST
59°F — 15.0°C
60°F — 15.6°C
61°F — 16.1°C
60°
≥ 59°
60°
≥ 60°
61°
< 60°
61°
<
≥ 59°
59°
>
60°
60°
60°
32°30′
San Diego
UNITED STATES
MEXICO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117°30′
117°00′
32°30′
30 APRIL 1973
0925 – 1046 PDT
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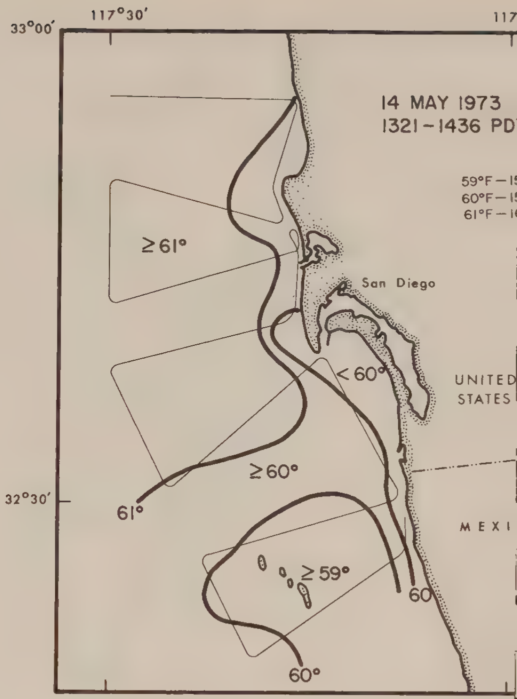
58°F – 14.4°C
59°F – 15.0°C
59°
59°
≥ 59°
≥ 58°
59°
≥ 59°
57°
58°
59°
59°
San Diego
UNITED STATES
MEXICO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32°30′
14 MAY 1973
1321 – 1436 PD
59°F – 1
60°F – 1
61°F – 1
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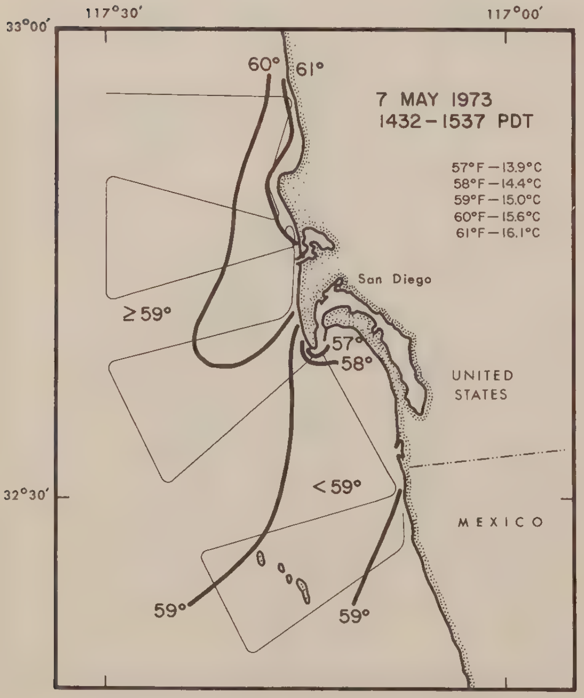
≥ 60°
61°
≥ 59°
60
60°
San Diego
UNITED
STATES
MEXI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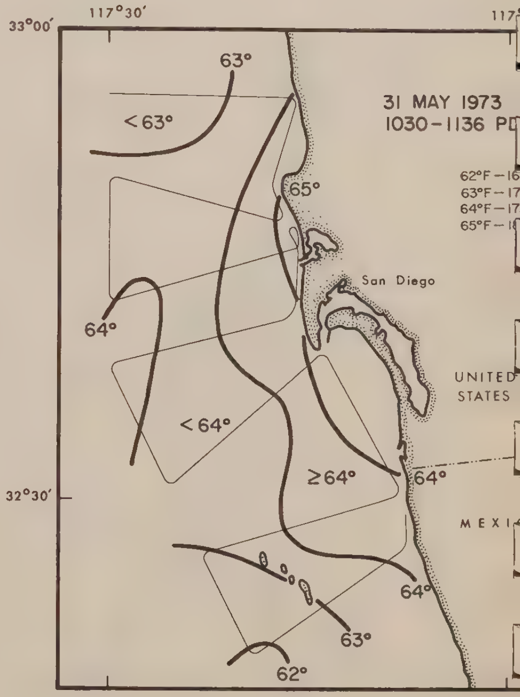
59°F – 15.0°C
60°F – 15.6°C
61°F – 16.1°C
60°
61°
≥ 59°
57°
58°
< 59°
59°
59°
San Diego
UNITED STATES
MEXICO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62°F – 16
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64°F – 17
65°F – 1
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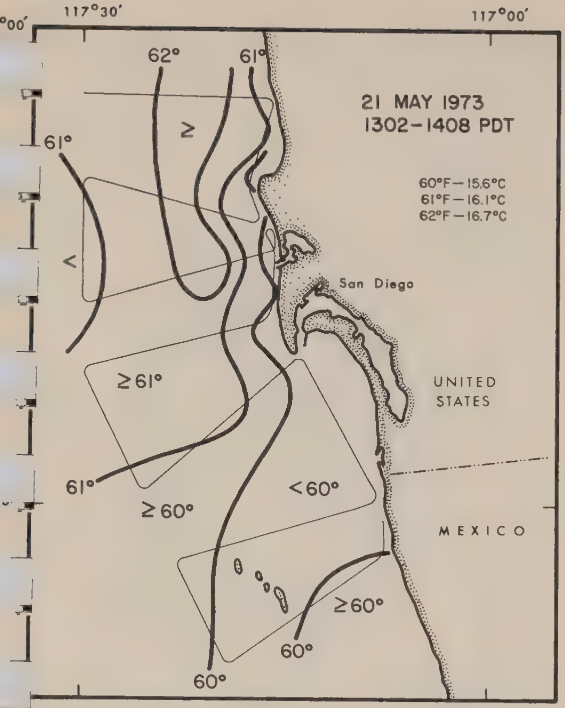
64°
< 64°
≥ 64°
64°
64°
63°
62°
San Diego
UNITED
STATES
MEXI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1302–1408 PDT
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62°
61°
61°
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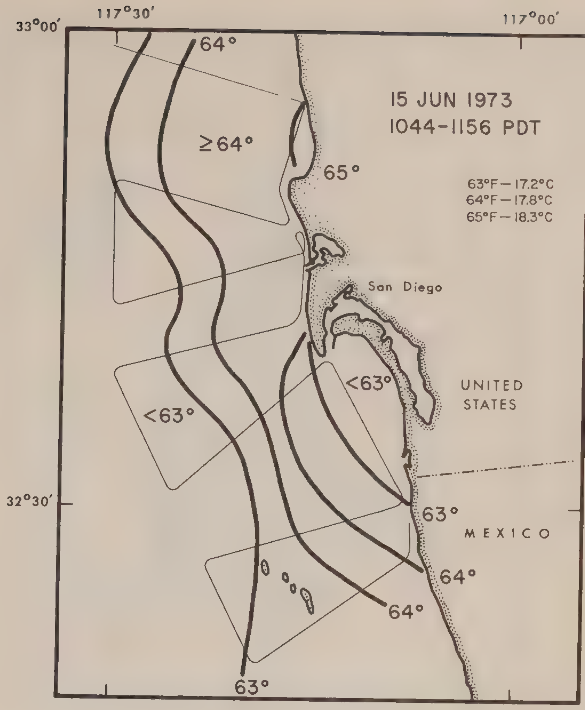
San Diego
≥61°
UNITED
STATES
61°
<60°
≥60°
MEXICO
≥60°
60°
60°


33°00′
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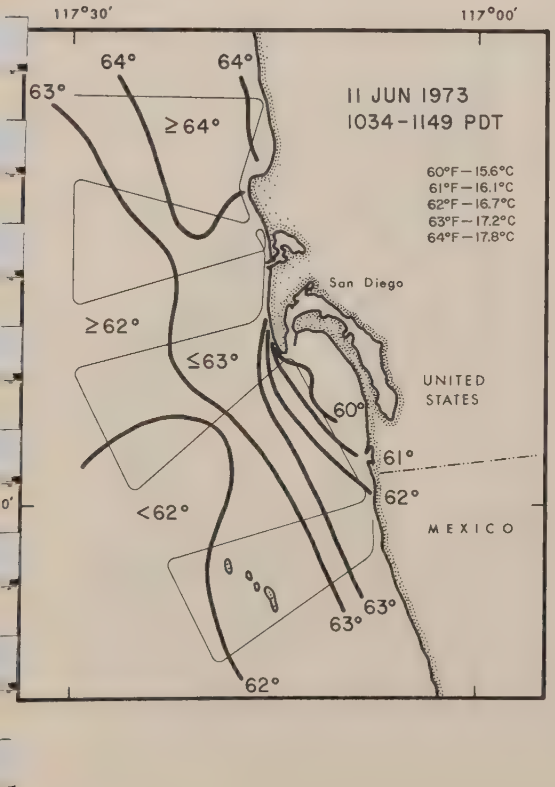
117°00′
64°
15 JUN 1973
1044–1156 PDT
≥64°
65°
63°F – 17.2°C
64°F – 17.8°C
65°F – 18.3°C
San Diego
<63°
<63°
UNITED
STATES
32°30′
63°
MEXICO
64°
64°
63°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62°F – 16.7°C
63°F – 17.2°C
64°F – 17.8°C
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UNITED
STATES
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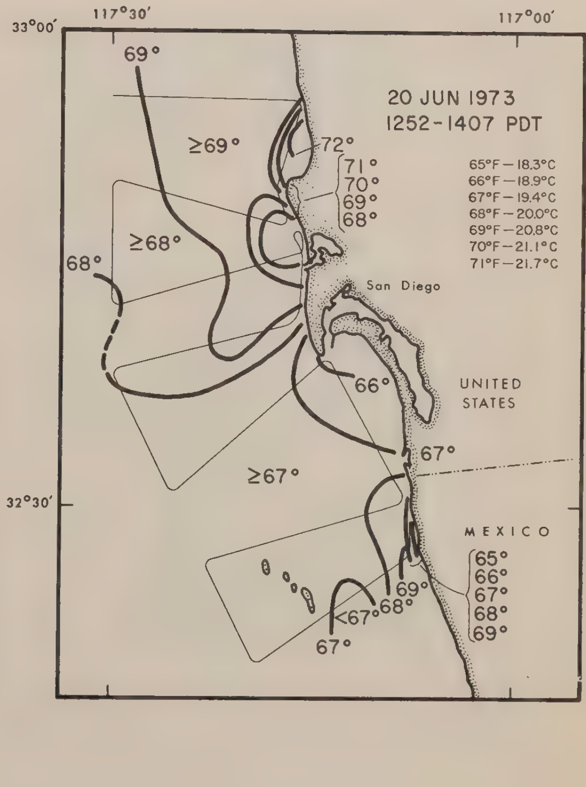
63°
62°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117°00′
69°
20 JUN 1973
1252–1407 PDT
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72°
71°
70°
69°
68°
65°F – 18.3°C
66°F – 18.9°C
67°F – 19.4°C
68°F – 20.0°C
69°F – 20.8°C
70°F – 21.1°C
71°F – 21.7°C
≥68°
68°
San Diego
66°
UNITED
STATES
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32°30′
MEXICO
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68°
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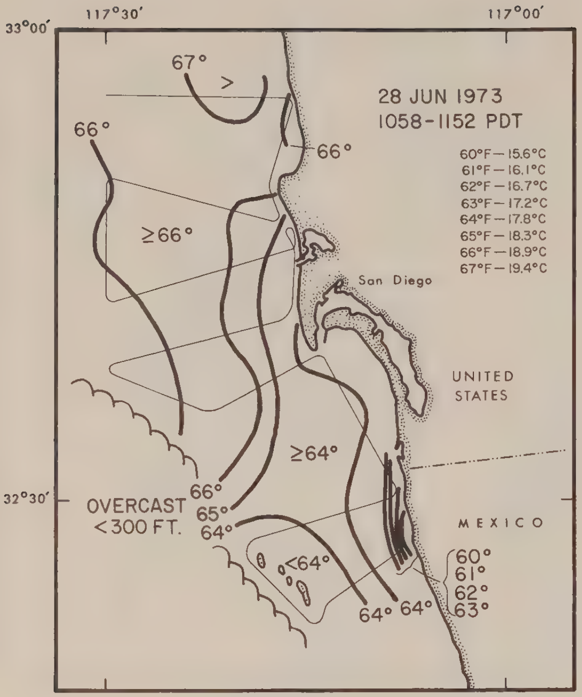
67°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1058-1152 PDT
60°F—15.6°C
61°F—16.1°C
62°F—16.7°C
63°F—17.2°C
64°F—17.8°C
65°F—18.3°C
66°F—18.9°C
67°F—19.4°C
67°
>
66°
66°
≥66°
San Diego
UNITED STATES
≥64°
MEXICO
OVERCAST <300 FT.
66°
65°
64°
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60°
61°
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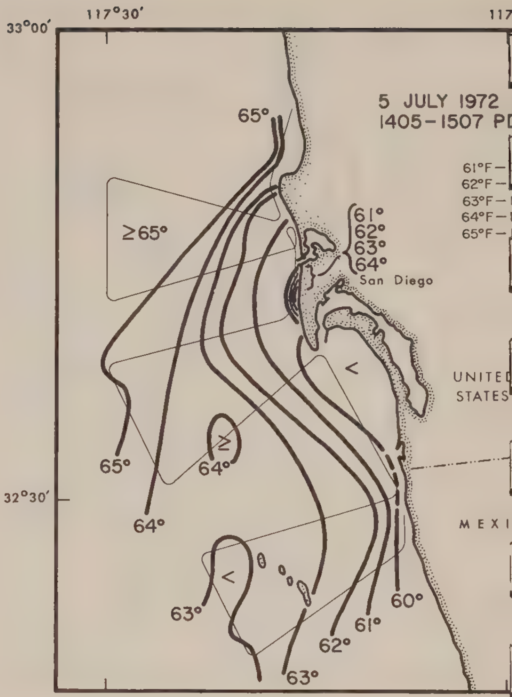
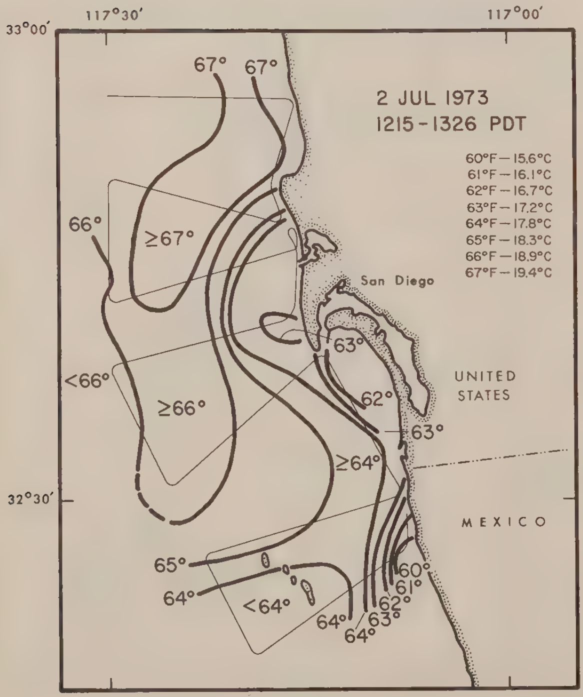
63°
64°
64°


33°00′
117°30′
117
5 JULY 1972
1405-1507 PD
61°F—
62°F—
63°F—
64°F—
65°F—
65°
≥65°
61°
62°
63°
64°
San Diego
<
UNITE
STATES
≥
64°
65°
32°30′
64°
MEXI
<
63°
60°
61°
62°
63°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117°00′
2 JUL 1973
1215-1326 PDT
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62°F—16.7°C
63°F—17.2°C
64°F—17.8°C
65°F—18.3°C
66°F—18.9°C
67°F—19.4°C
67°
67°
66°
≥67°
San Diego
63°
<66°
≥66°
UNITED STATES
62°
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32°30′
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60°
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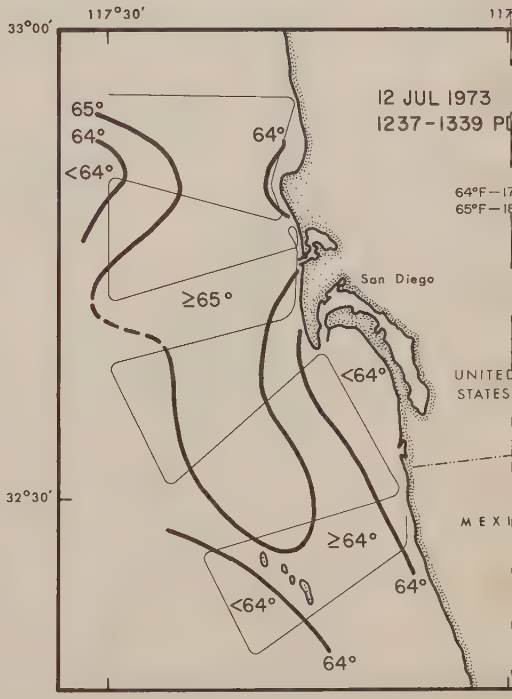
63°
64°
64°


33°00′
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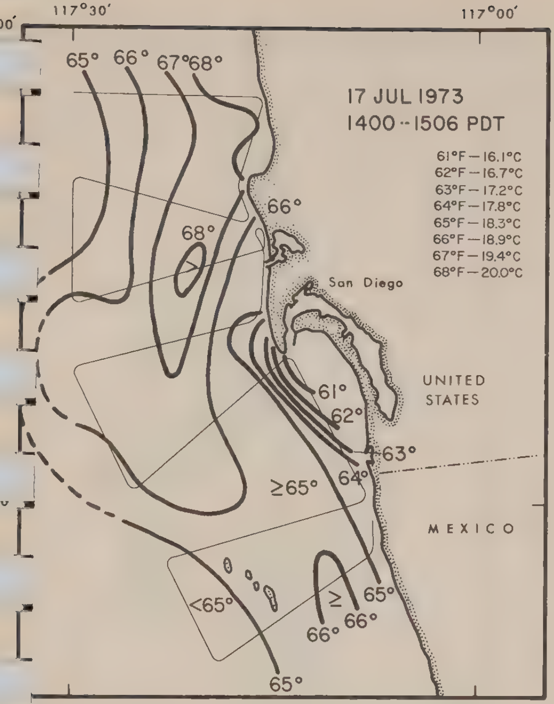
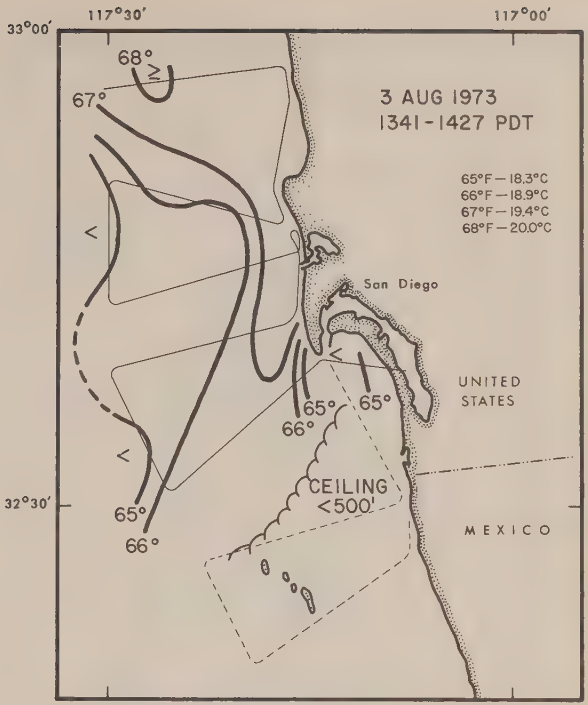
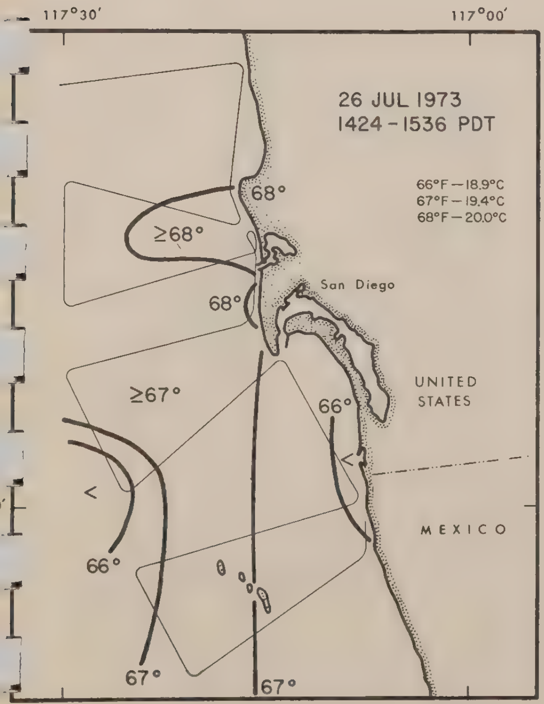
117
12 JUL 1973
1237-1339 P
65°
64°
<64°
64°
64°F—17
65°F—18
San Diego
≥65°
<64°
UNITED
STATES
32°30′
MEXI
≥64°
<64°
64°
64°


117°30′
117°00′
17 JUL 1973
1400 - 1506 PDT
61°F — 16.1°C
62°F — 16.7°C
63°F — 17.2°C
64°F — 17.8°C
65°F — 18.3°C
66°F — 18.9°C
67°F — 19.4°C
68°F — 20.0°C
65°
66°
67°
68°
66°
68°
San Diego
61°
62°
63°
64°
≥65°
UNITED
STATES
MEXICO
<65°
≥
65°
66°
66°
65°


33°00′
117°30′
117°00′
3 AUG 1973
1341 - 1427 PDT
65°F — 18.3°C
66°F — 18.9°C
67°F — 19.4°C
68°F — 20.0°C
68°
≥
67°
<
San Diego
<
65°
65°
66°
UNITED
STATES
<
CEILING
<500′
32°30′
65°
66°
MEXICO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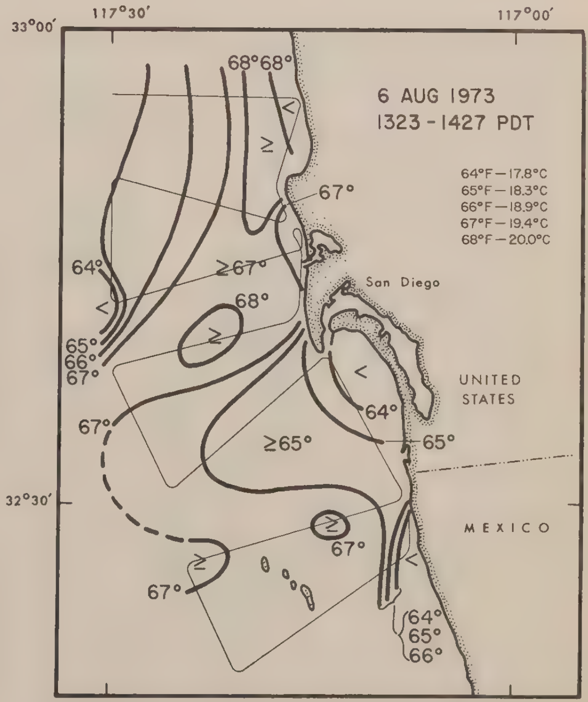
117°00′
26 JUL 1973
1424 - 1536 PDT
66°F — 18.9°C
67°F — 19.4°C
68°F — 20.0°C
68°
≥68°
San Diego
68°
≥67°
66°
UNITED
STATES
<
<
MEXICO
66°
67°
67°


33°00′
117°30′
117°00′
68°
68°
6 AUG 1973
1323 - 1427 PDT
<
≥
64°F — 17.8°C
65°F — 18.3°C
66°F — 18.9°C
67°F — 19.4°C
68°F — 20.0°C
67°
64°
≥67°
San Diego
<
68°
≥
65°
66°
67°
<
UNITED
STATES
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65°
32°30′
≥
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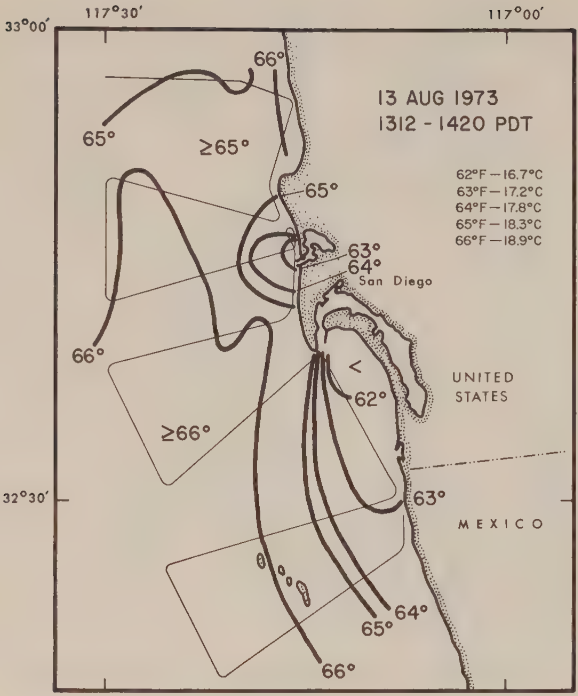
64°
65°
66°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33°00′
32°30′
13 AUG 1973
1312 - 1420 PDT
62°F — 16.7°C
63°F — 17.2°C
64°F — 17.8°C
65°F — 18.3°C
66°F — 18.9°C
66°
65°
≥65°
65°
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San Diego
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UNITED STATES
≥66°
63°
MEXICO
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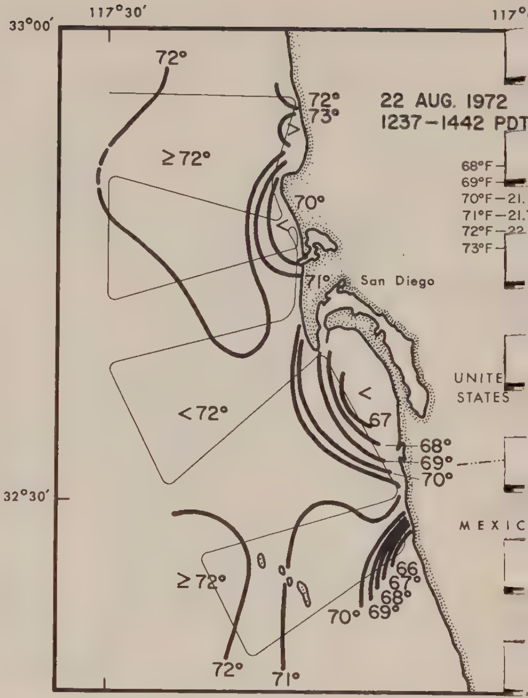
65°
66°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33°00′
32°30′
72°
72°
73°
22 AUG. 1972
1237–1442 PDT
68°F —
69°F —
70°F — 21.
71°F — 21.
72°F — 22.
73°F —
≥72°
70°
<
71°
San Diego
UNITE
STATES
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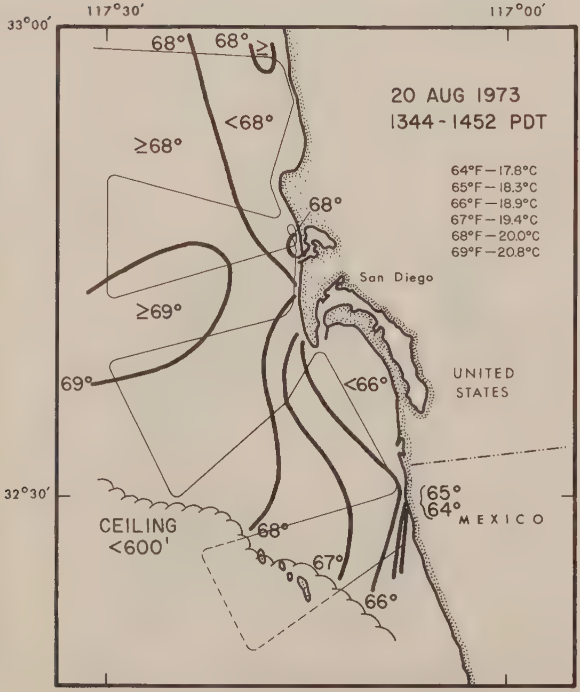
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1344 - 1452 PDT
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≥68°
64°F — 17.8°C
65°F — 18.3°C
66°F — 18.9°C
67°F — 19.4°C
68°F — 20.0°C
69°F — 20.8°C
68°
San Diego
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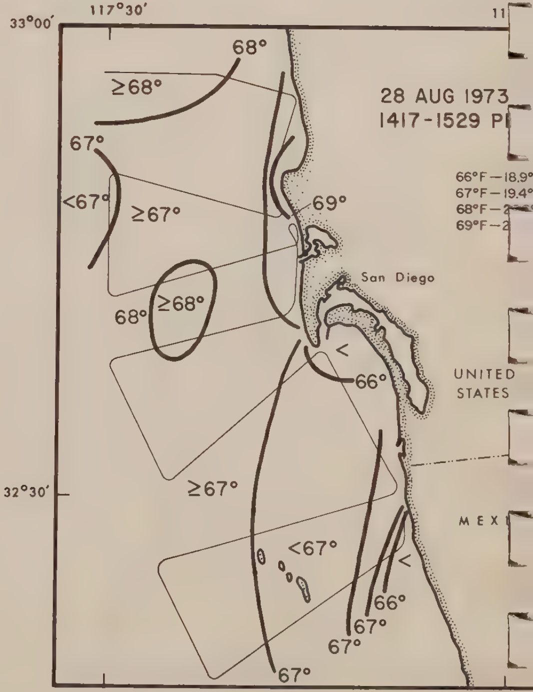
67°
66°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33°00′
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28 AUG 1973
1417-1529 P
67°
66°F — 18.9°
67°F — 19.4°
68°F — 2
69°F — 2
<67°
≥67°
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San Diego
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<67°
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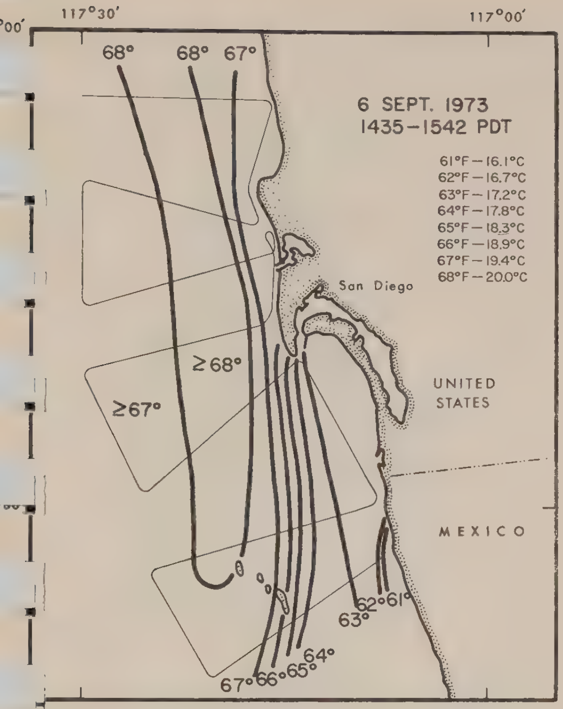
67°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63°F – 17.2°C
64°F – 17.8°C
65°F – 18.3°C
66°F – 18.9°C
67°F – 19.4°C
68°F – 20.0°C
San Diego
UNITED STATES
MEXICO
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62°
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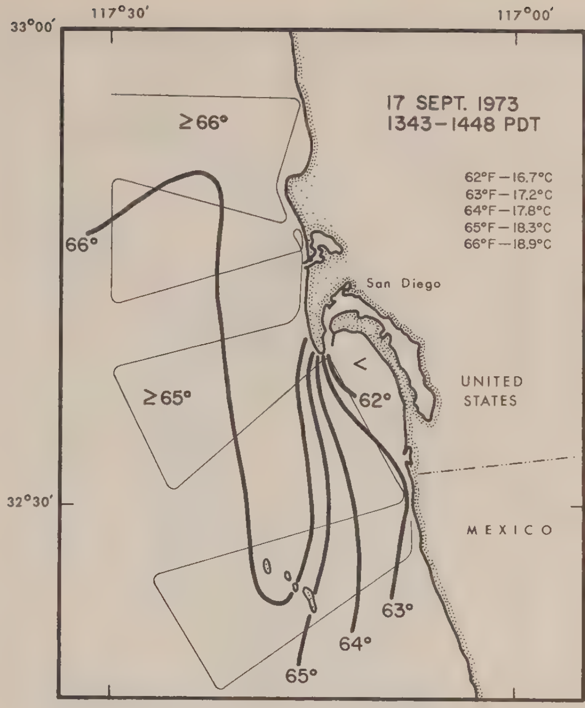
66°
65°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63°F – 17.2°C
64°F – 17.8°C
65°F – 18.3°C
66°F – 18.9°C
≥66°
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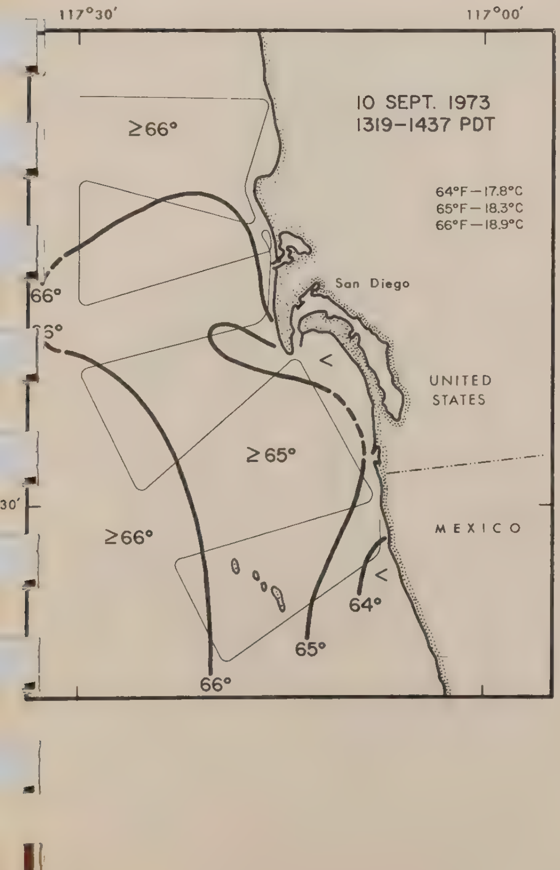
San Diego
<
62°
≥65°
UNITED STATES
MEXICO
63°
64°
65°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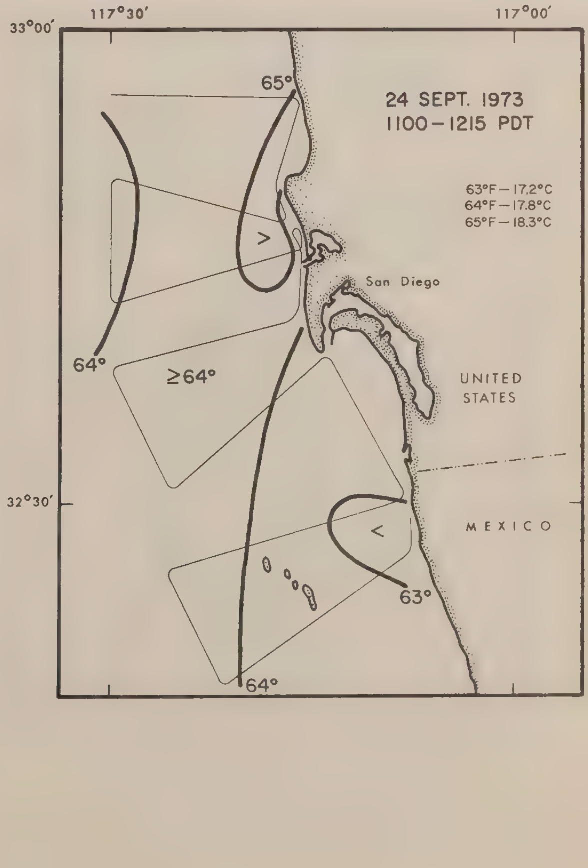
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65°F – 18.3°C
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≥64°
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MEXICO
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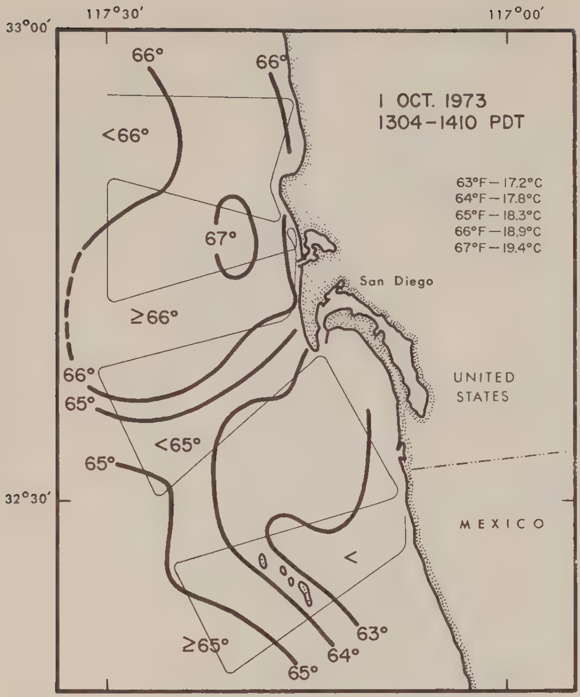
64°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66°F – 18.9°C
67°F – 19.4°C
66°
66°
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67°
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64°
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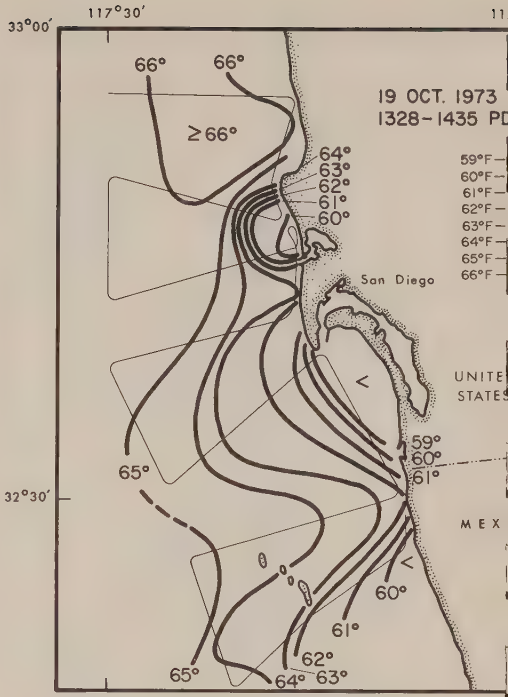
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60°F –
61°F –
62°F –
63°F –
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65°F –
66°F –
66°
66°
≥66°
64°
63°
62°
61°
60°
San Diego
UNITE
STATES
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59°
60°
61°
65°
32°30′
MEX
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60°
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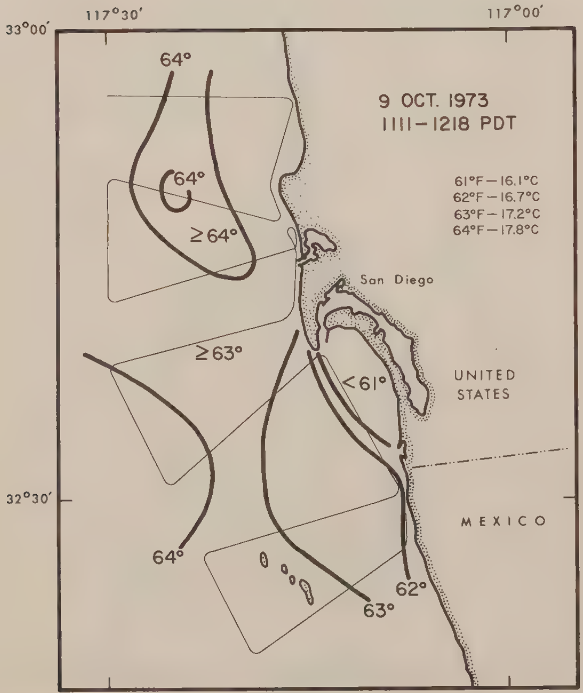
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1111–1218 PDT
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63°F – 17.2°C
64°F – 17.8°C
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≥64°
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≥63°
<61°
UNITED STATES
32°30′
MEXICO
64°
62°
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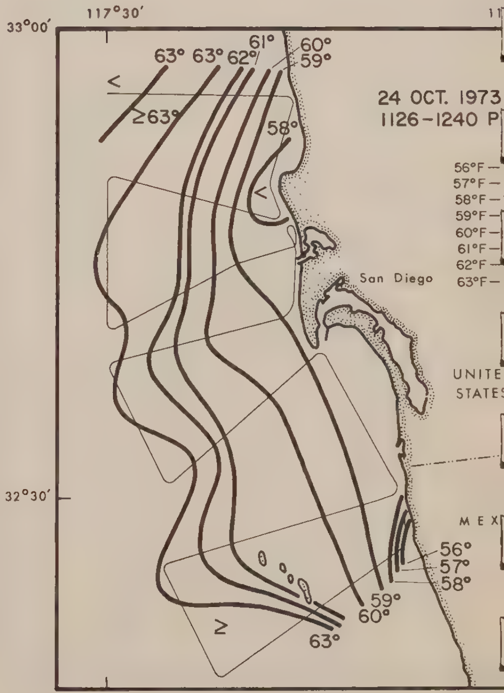
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63°
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58°
24 OCT. 1973
1126–1240 P
56°F –
57°F –
58°F –
59°F –
60°F –
61°F –
62°F –
63°F –
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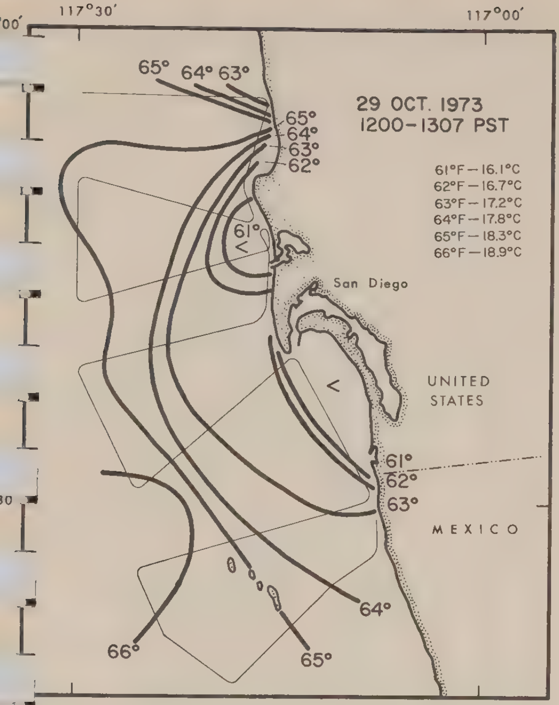
San Diego
UNITE
STATES
32°30′
MEX
56°
57°
58°
59°
60°
≥
63°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29 OCT. 1973
1200-1307 PST
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62°F — 16.7°C
63°F — 17.2°C
64°F — 17.8°C
65°F — 18.3°C
66°F — 18.9°C
65° 64° 63°
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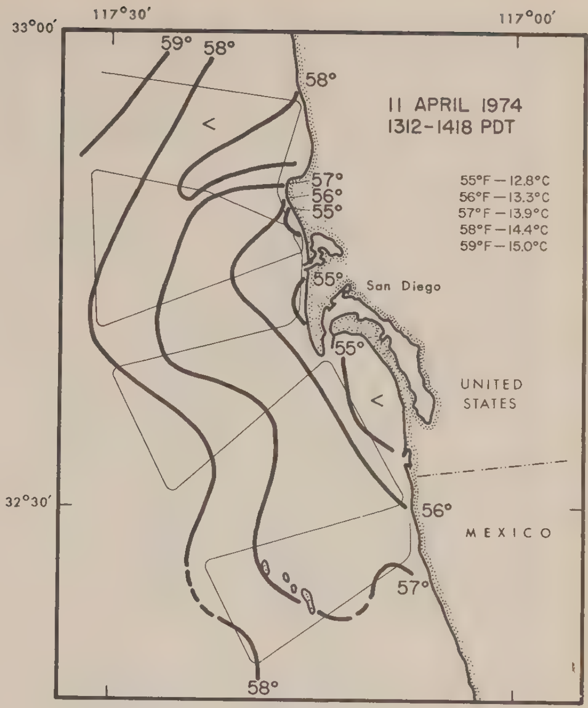
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11 APRIL 1974
1312-1418 PDT
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56°F — 13.3°C
57°F — 13.9°C
58°F — 14.4°C
59°F — 15.0°C
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San Diego
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56°
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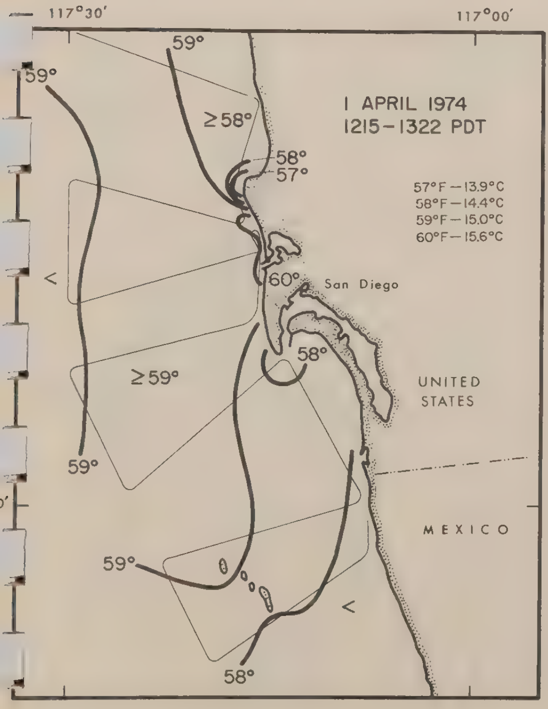
58°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1215-1322 PDT
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59°F — 15.0°C
60°F — 15.6°C
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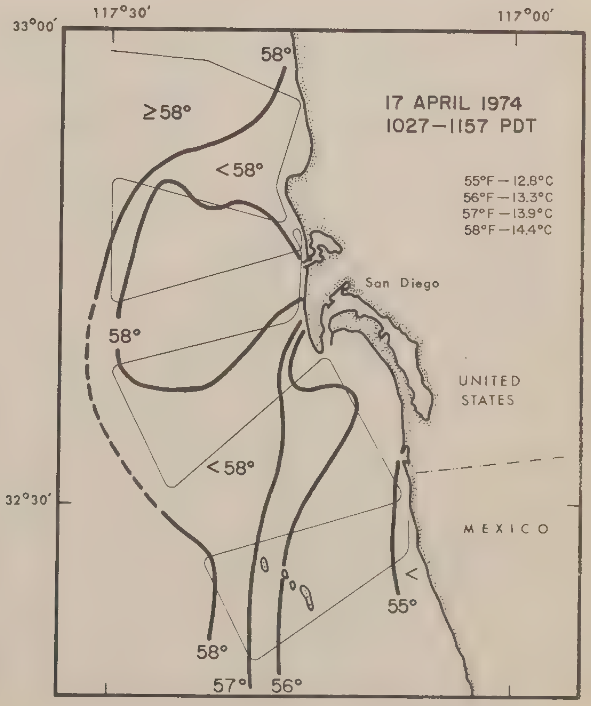
58°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1027-1157 PDT
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56°F — 13.3°C
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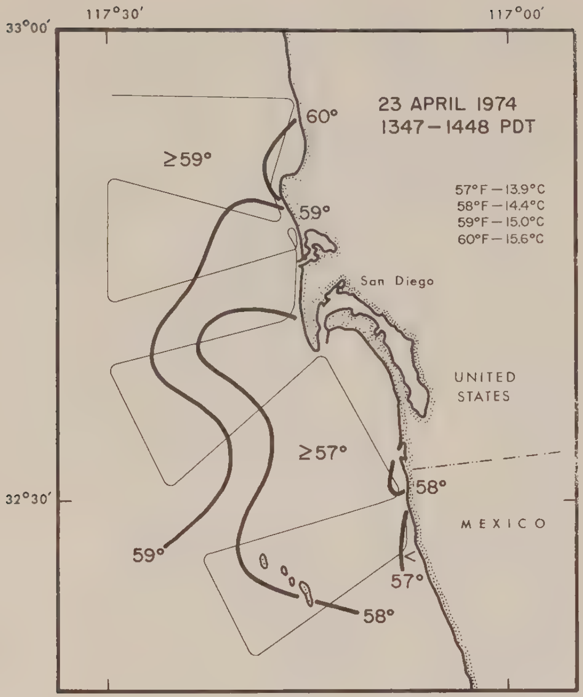
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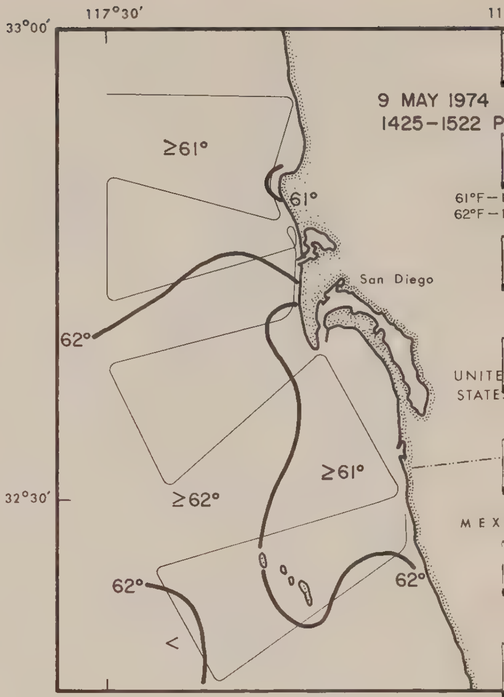
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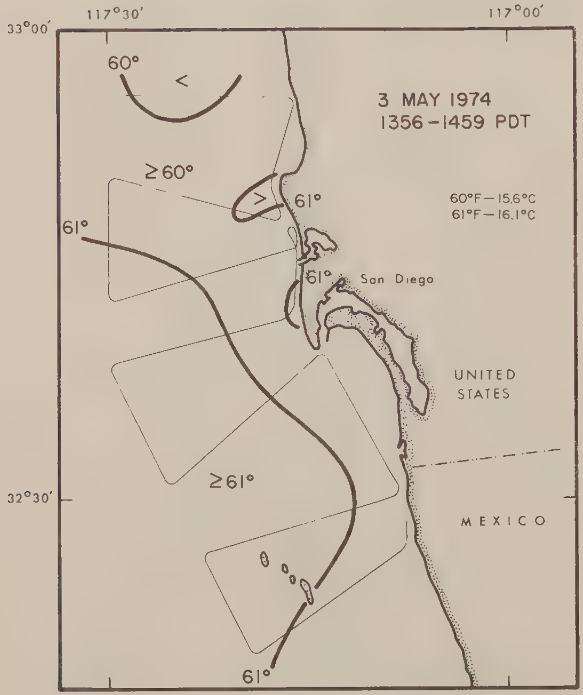
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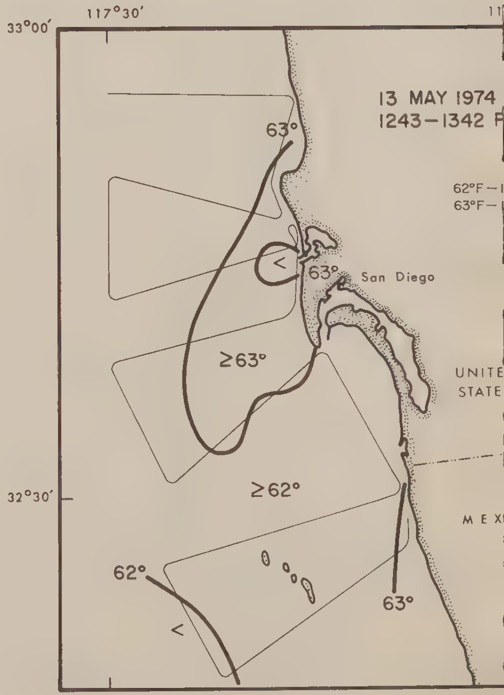
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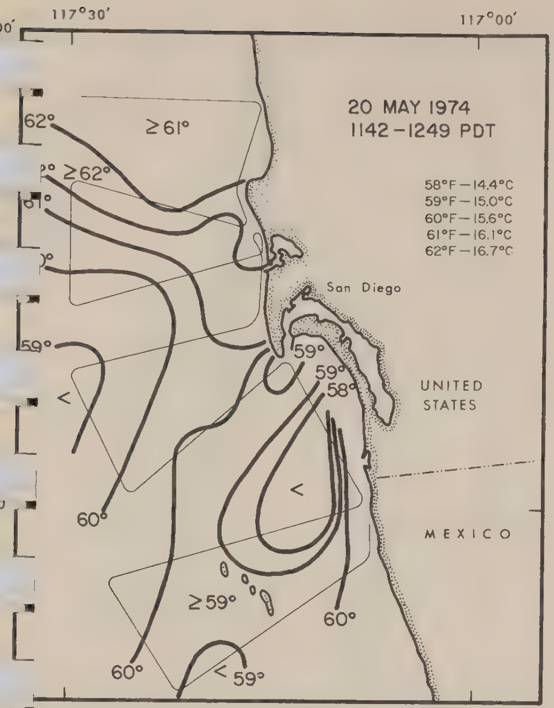
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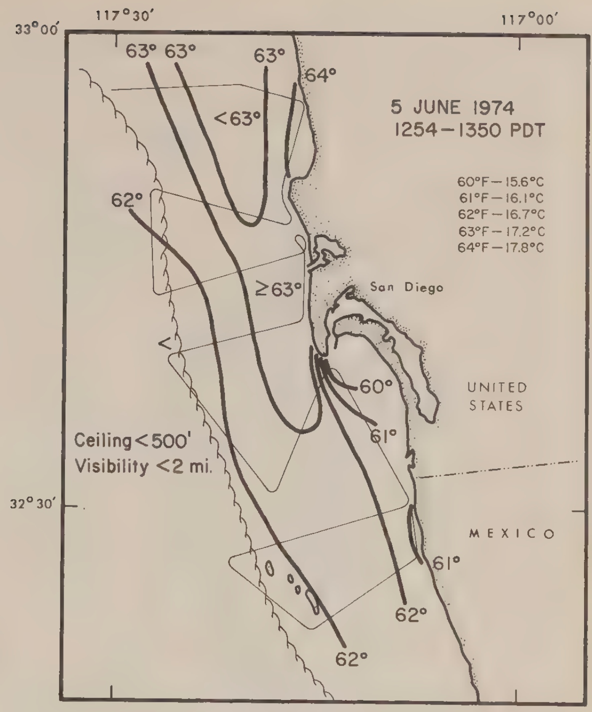
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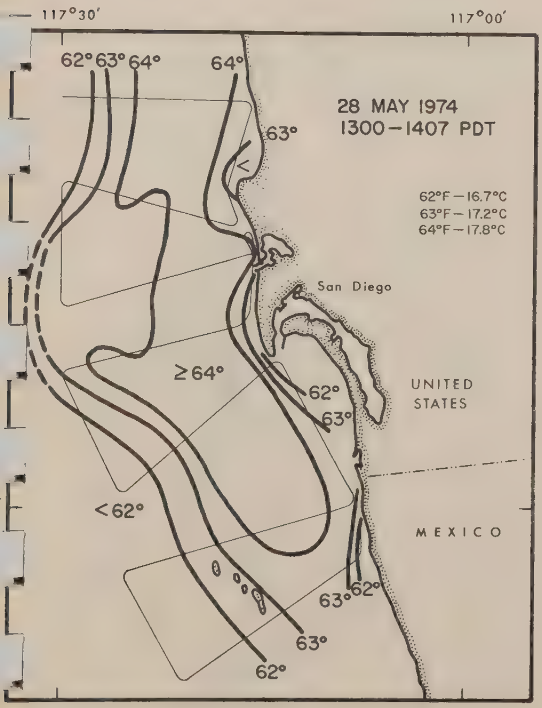
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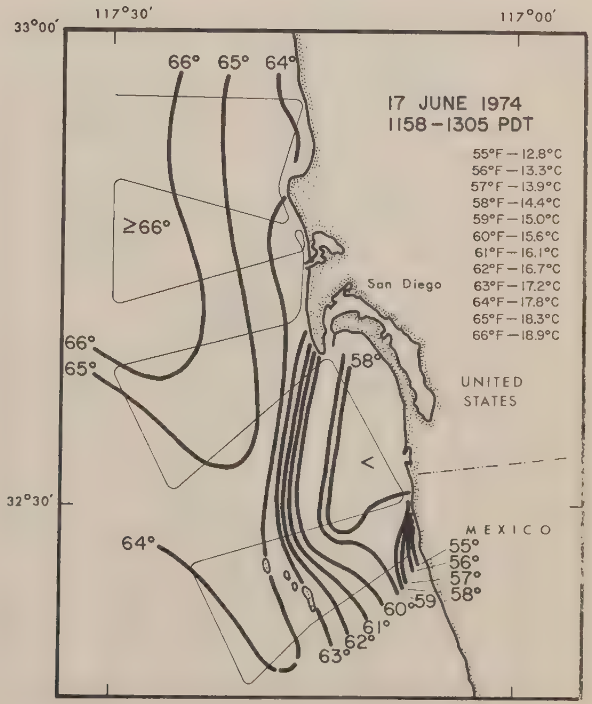
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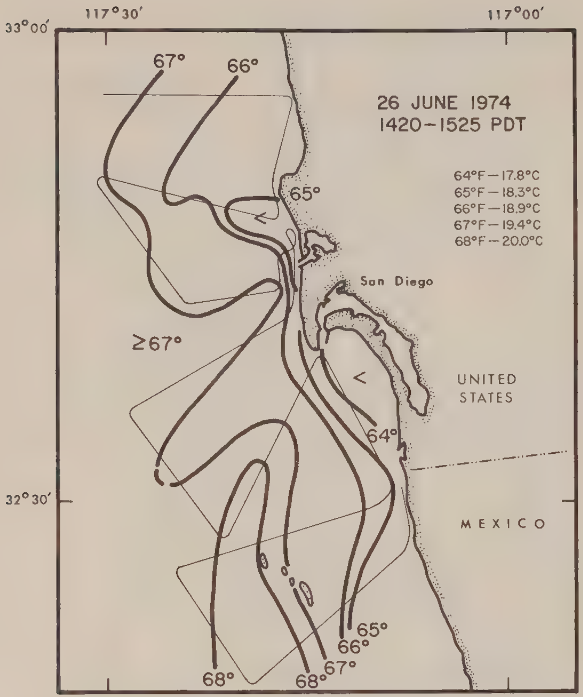
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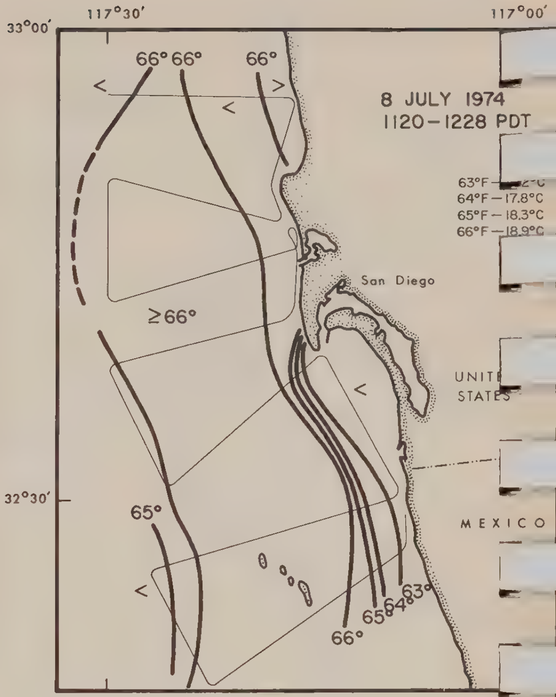
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UNIT
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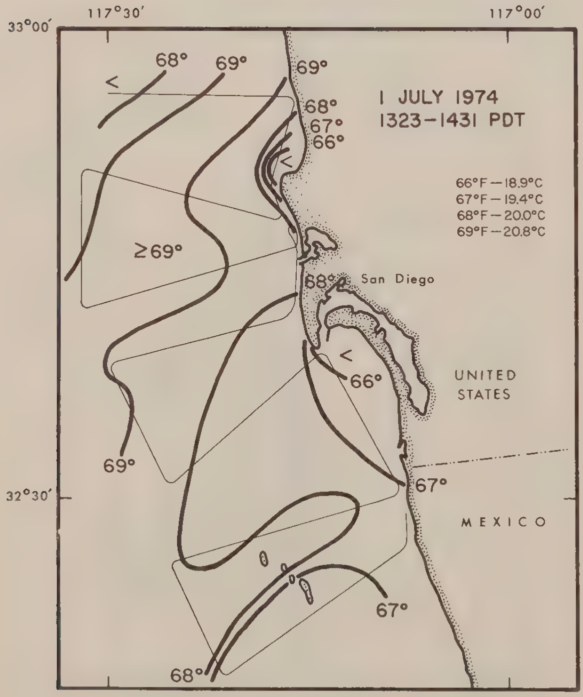
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66°F – 18.9°C
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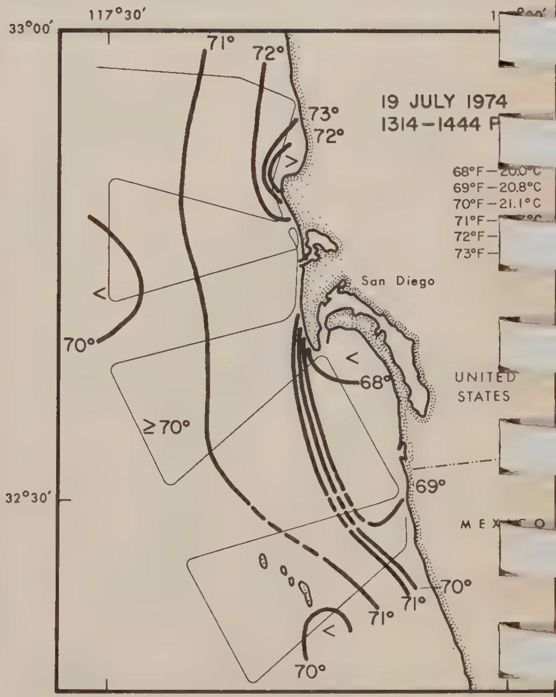
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1314–1444

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70°F – 21.1°C
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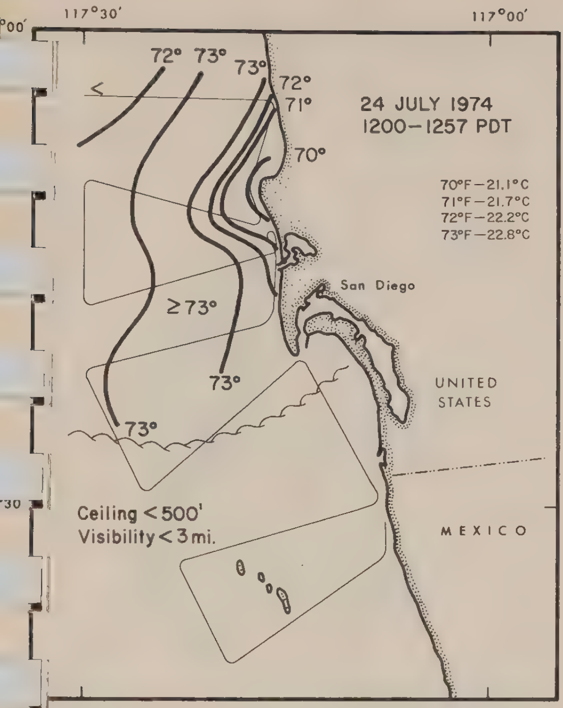
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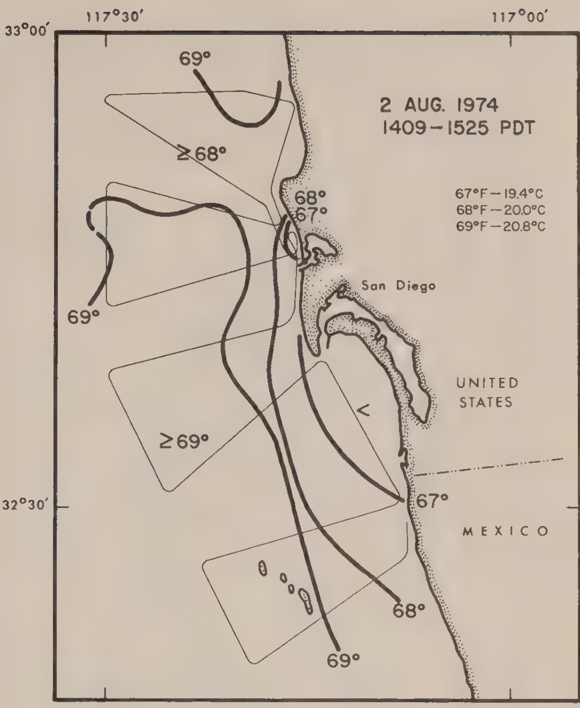
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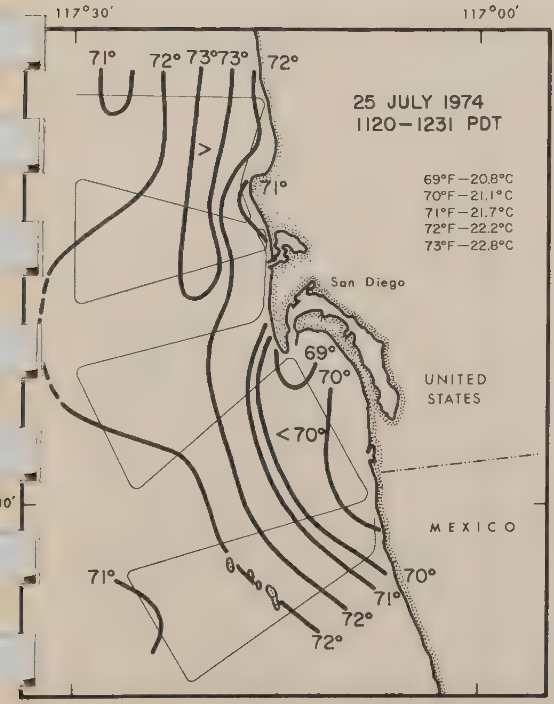
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San Diego
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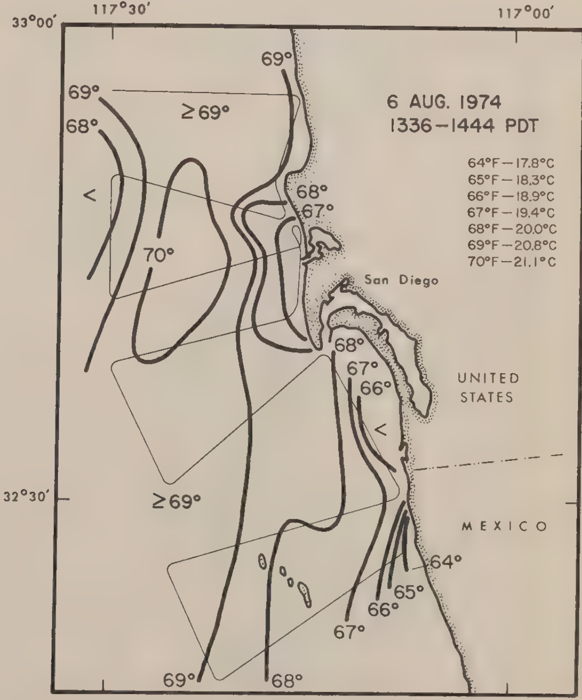
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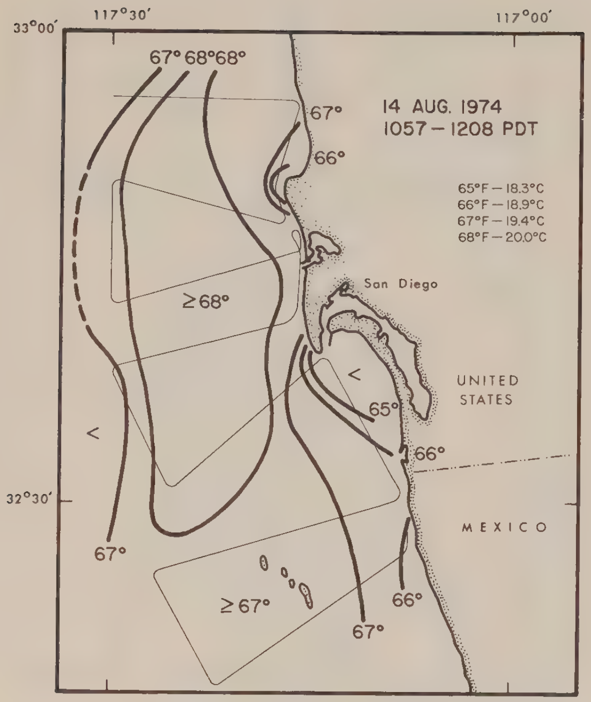
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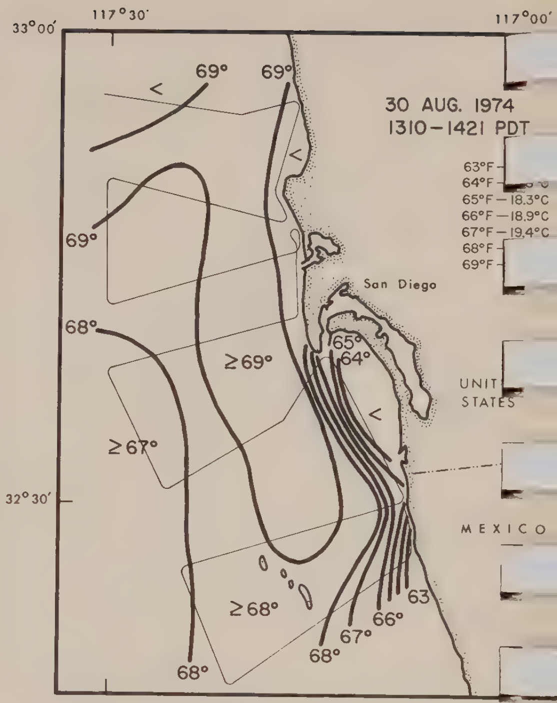
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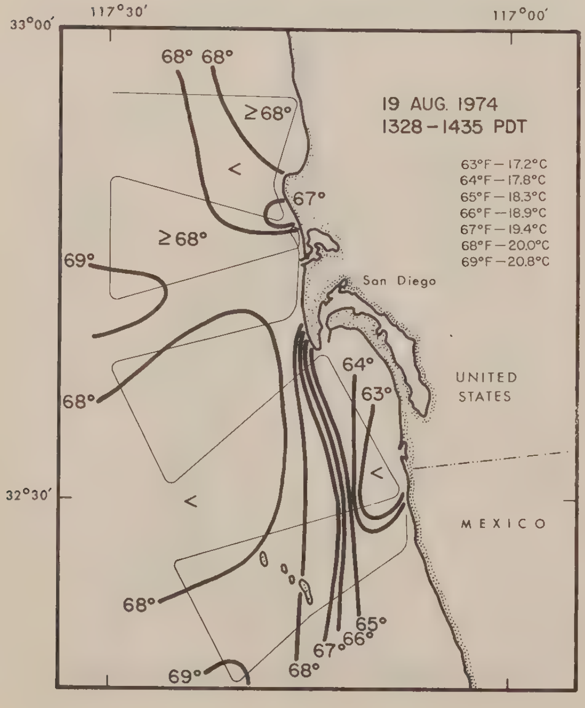
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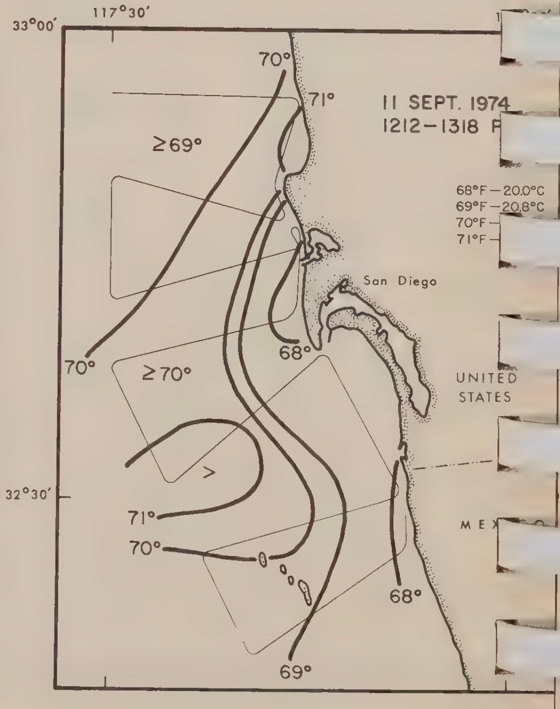
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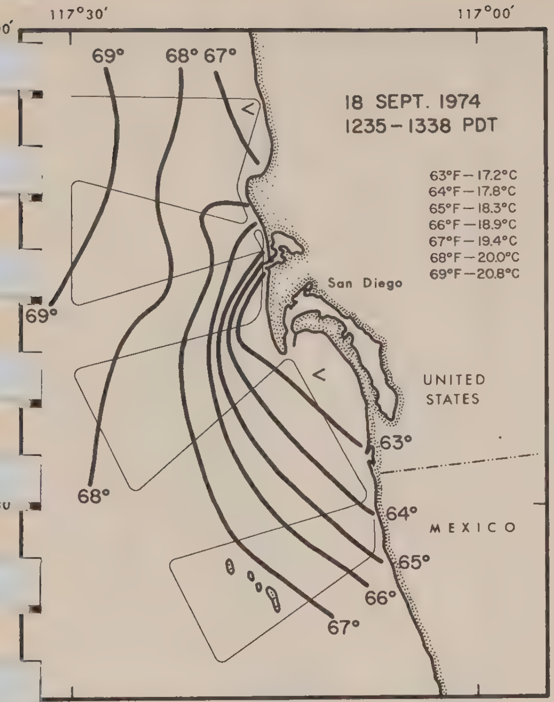
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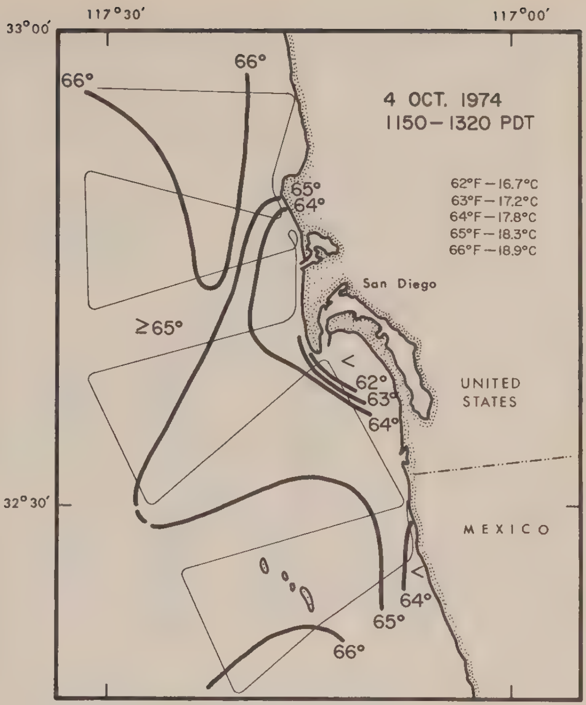
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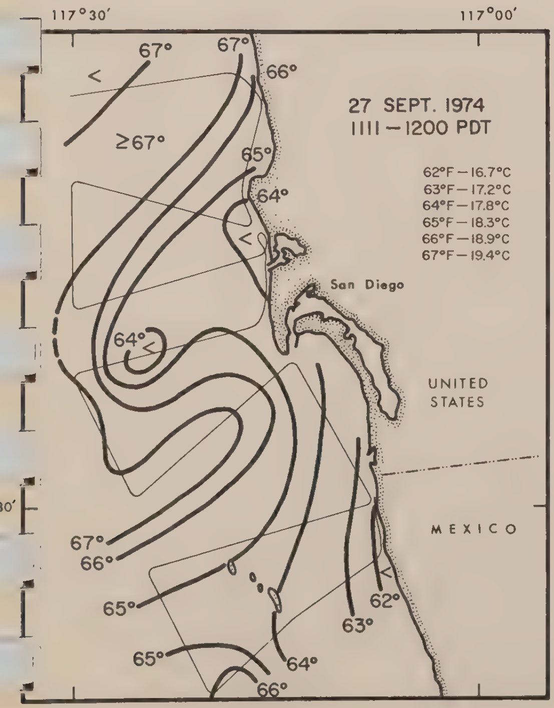
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66°F – 18.9°C
67°F – 19.4°C
San Diego
UNITED STATES
MEXICO
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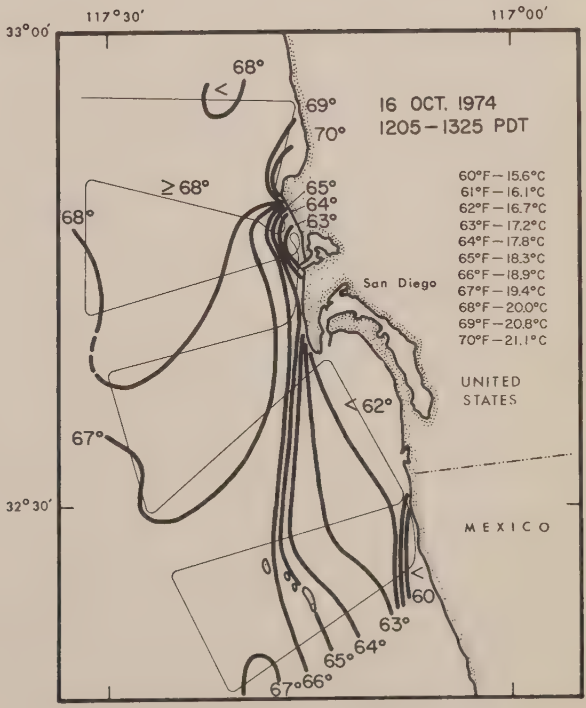
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San Diego
UNITED STATES
MEXICO
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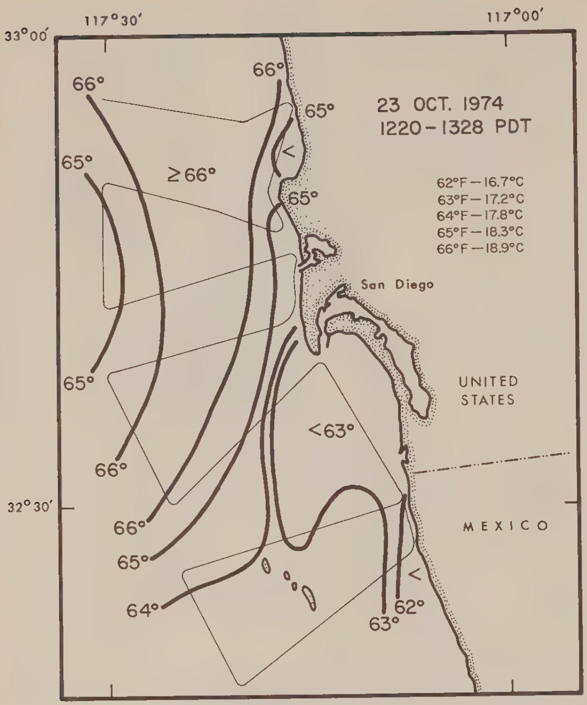
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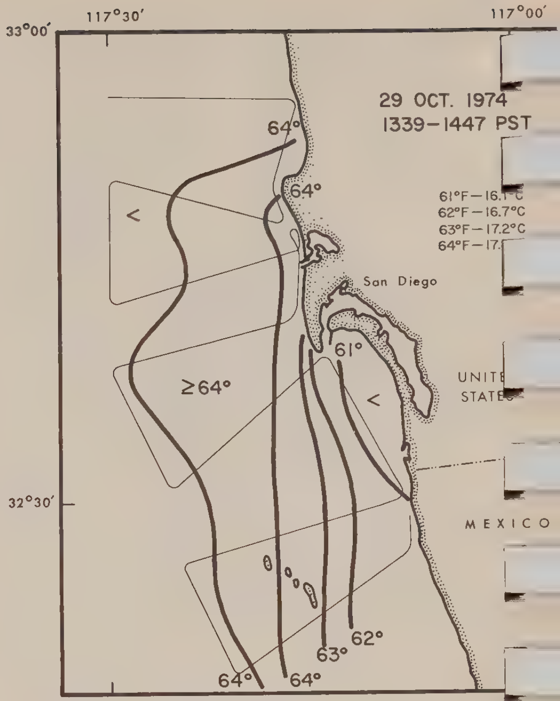
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San Diego
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≥64°
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UNITE
STATE
MEXICO
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☆ GPO: 1978—799-830/10-10

NOAA Technical Report NMFS SSRF-721

National Marine Fisheries Service Survey of Trace Elements in the Fishery Resource

R. A. Hall, E. G. Zook, and
G. M. Meaburn

March 1978

U.S. DEPARTMENT OF COMMERCE
Juanita M. Kreps, Secretary
National Oceanic and Atmospheric Administration
Richard A. Frank, Administrator
National Marine Fisheries Service

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National Marine Fisheries Service Survey of Trace Elements in the Fishery Resource

R. A. HALL, E. G. ZOOK, and G. M. MEABURN[1]

ABSTRACT

Trace element levels have been determined in tissues of 204 species of finfish, Mollusca, and Crustacea taken from 198 sites around the coastal United States, including Alaska and Hawaii. The survey was undertaken as part of the Microconstituents Program of the National Marine Fisheries Service, and covers the occurrence of 15 elements: antimony, arsenic, cadmium, chromium, copper, lead, manganese, mercury, molybdenum, nickel, selenium, silver, tin, vanadium, and zinc. Total concentrations of each element were determined without regard to chemical form. The species analyzed represent approximately 93% of the volume of the U.S. commercial and sportfish catch. The analytical data are summarized in several ways in order to emphasize different aspects of the trace element distributions. Mean levels of each element are presented in relation to the number of species examined, the U.S. (commercial and sportfish) catch, and the U.S. catch intended for consumption. More detailed analytical data on all 15 elements are given for individual species with reference to tissue analyzed, length and weight of fish, and location of catch. For the most part, experimental results are presented without interpretive comment. Mean levels of mercury, the only element for which a regulatory action level is in force, were found to exceed 0.5 ppm Hg in species representing less than 2% of the U.S. catch intended for consumption.

INTRODUCTION

A primary goal of the National Marine Fisheries Service (NMFS) is to promote the economic utilization of the Nation's fishery resource, in full recognition of the necessity to safeguard the health of the consumer. The NMFS Microconstituents Program was established with the purpose, among others, of developing information on the occurrence of trace elements in fishes and fishery products intended for human consumption. Over the past decade there has been a growing concern that certain chemical elements and their compounds entering the marine environment, chiefly as a result of industrial and urban pollution, may be accumulating in fishes at levels constituting a public health hazard. It was apparent in 1970, when the U.S. Food and Drug Administration (FDA) established a temporary action level for a permissable mercury content of fish, that there was a lack of information on trace element levels in fishes. Further, it was evident that a thorough assessment of any adverse effects of these microconstituents on the future utilization of the resource would require the availability of a broad data base to which newly acquired measurements of contaminants could be referred. To meet these needs and with the added incentive of reassuring a concerned fishing industry, NMFS undertook a series of surveys to determine, through chemical analysis of fish tissues, trace element levels throughout the U.S. fish supply.

A preliminary survey on the occurrence of five elements (arsenic, cadmium, chromium, lead, and mercury) was completed in 1974. At least 10 samples each of 29 commonly consumed, domestic and imported, fishes and shellfishes were analyzed in the study. With the exception of Pacific halibut, *Hippoglossus stenolepis*; Pacific rockfish (mixed species); and red snapper, *Lutjanus campechanus*, none of the samples contained mercury above the FDA action level of 0.5 ppm Hg. Details of this study have been published (Zook et al. 1976).

A comprehensive trace element survey, referred to here as the Resource Survey, was initiated in 1971 to cover the occurrence of 15 elements—antimony (Sb), arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), manganese (Mn), mercury (Hg), molybdenum (Mo), nickel (Ni), selenium (Se), silver (Ag), tin (Sn), vanadium (V), and zinc (Zn)—in 204 species representing at least 93% of the volume of the U.S. commercial catch (Wheeland 1973) and 93% of the volume of the U.S. sportfish catch (Deuel 1973). The elemental analyses provide baseline data to help identify where there may be a potential problem involving species, elements, or locations. This report presents the experimental data obtained during the course of the Resource Survey.

MATERIALS AND METHODS

Fish Collection

For purposes of fish collection and data assembly, U.S. coastal waters were divided into seven areas along natural and traditional boundaries. Each area was then divided into three degree lettered squares, except in Alaska, and subdivided into one degree sites as shown in

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[1] Southeast Fisheries Center, National Marine Fisheries Service, NOAA, Regent Drive, University of Maryland Campus, College Park, MD 20740.

Appendix Figure 1; Alaskan sites measure one by two degrees. Individuals from NMFS laboratories and affiliated agencies involved in fish collection (Appendix Table 1) in each of these areas, were asked to collect designated species of fish and shellfish. Most of the 167 requested species, genera, or families were collected. The original list was augmented by additional species to give a final tally of 204 species. Collectors were provided a protocol for labeling, preparing, storing, and shipping fishes, as well as a supply of Fish Data Labels (Appendix Figure 2).

Collectors were requested to supply enough fish of each assigned species to yield 10 2-lb samples of edible muscle hereafter referred to as a group) from each of four sites within their area (40 samples per species per area). Fishes were frozen as soon as possible after capture and shipped under dry ice via air freight to the Utilization Research Division, Northwest and Alaska Fisheries Center,[2] Seattle, Wash., from Pacific locations, or to the College Park Laboratory, Southeast Fisheries Center,[3] College Park, Md., from Atlantic and Gulf of Mexico ocations. Each fish was stored, as received, at −25°C until samples were prepared from them.

Wherever possible, collectors were asked to provide the common and scientific names, sex, length, weight, age, and tissue or cut of the fish; the date, depth, and location latitude and longitude and/or local name) of capture; he number of individual fish; and the name of the boat and captain or market, as appropriate, on the Fish Data Label. If not performed by the collector, individual fish were counted, weighed, and measured at College Park nd Seattle; fish were also sexed at Seattle.

Finfishes were received for sample preparation in various forms; whole, headed and gutted, headed only, gutted only, skinless fillets and chunks, with and without kin. Livers were included with about one-fourth of the infishes. Some milt and roe were also received. Shellishes were received both whole and prepared; shrimps were whole or headed; lobsters and crabs were in the hell; oysters and abalone were shucked; clams were in he shell or shucked; squid and octopi were whole; most callops were received as abductor muscle only.

ample Preparation

Fish were thawed immediately prior to sample reparation and processed as rapidly as possible to minimize any possible moisture loss, decomposition, or ontamination from the laboratory environment. Skinless fillets or their closest equivalent were prepared from most finfishes. Some small species and juveniles of other pecies were ground whole or as otherwise received. hrimps were headed, peeled, and, unless too small, eveined. Lobsters were prepared as body, claw, tail, leg, a combination of claw and tail. Crabs were prepared as ody, claw, or as a combination of the two parts. Clams and oysters were shucked. Except in one case, abductor muscles of scallops were prepared. Squid and octopi were prepared whole or as mantle only. Most samples consisted of raw tissue, although lobsters and some crabs from the Pacific coast were cooked. Each sample was assigned a laboratory reference number and thoroughly ground to provide a homogeneous mixture for analysis. From 1 to 10 subsamples of each sample were packed in polyethylene cups and stored at or below −25°C.

Analytical Procedures

All chemical analyses were performed under contract[4] by Omni Research, Inc., San German, Puerto Rico. The concentration levels of 15 elements were determined in each of approximately 15,000 sample cups, including controls and duplicates, by atomic absorption spectrophotometry (AAS). Mercury was analyzed by a flameless (cold vapor) method based on that described by Hatch and Ott (1968) and later applied to analysis of fish tissues (Uthe et al. 1970). Arsenic and selenium were analyzed as their hydrides following procedures based on the arsine generation method of Dalton and Malanoski (1971) and further adapted from a development of this method for analysis of As and Se in fish tissues (Southeast Utilization Research Center 1975[5]). The samples were at first digested for As analysis by dry ashing methods (about 40% of the samples). For the remainder of the As and all of the Se analyses, samples were wet ashed. The remaining elements (Sb, Cd, Cr, Cu, Pb, Mn, Mo, Ni, Ag, Sn, V, and Zn) were analyzed by conventional flame AAS, with direct aspiration of a digested sample after appropriate dilution. For Sb, Mo, Sn, and V analyses, samples were dry ashed only. For the other eight elements, approximately the first third of the 15,000 sample cups were analyzed following wet ashing with a HNO_3-$HClO_4$ mixture; these were reanalyzed along with the remaining samples when the contractor changed to a dry ashing procedure.

Numbered cups of all samples, including randomly interspersed control and replicate samples, were shipped in the frozen state by the College Park Laboratory to Omni at regular intervals. Omni was not aware of the contents of any cup.

Control samples were prepared from the raw muscle of Pacific halibut by grinding and thoroughly mixing the tissue from several large fish. They were packaged identically to the other samples. A minimum of 10 controls was included in each shipment of 300 sample cups. In all, approximately 600 controls were sent to the contractor. Four different control samples were used during consecutive periods of the contract. They were also used at the College Park Laboratory as control samples for in-house analytical experiments and other contractual work. Analytical results for controls were the first items checked

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ormerly known as the Pacific Utilization Research Center.

ormerly known as the Southeast Utilization Research Center.

[4] Department of Commerce contract No. 2-35403, June 28, 1972.

[5] Southeast Utilization Research Center, NMFS. 1975. Arsenic and selenium in North American lobster (*Homarus americanus*) including relation to previously determined mercury content. NMFS in-house report, 71 p.

Upon receipt of data from Omni. The values reported for each element were followed from shipment to shipment to detect any abnormal trends. Three consecutive high or low values were taken to indicate the existence of an analytical problem. To avoid having all samples in a group analyzed during a period of abnormally high or low values, whenever possible no more than two samples from the same group were sent in the same shipment. Bar graphs of control sample analytical values were constructed to assist in the evaluation and were sent periodically to Omni.

As a method of checking analytical reproducibility over time, in addition to using controls, a minimum of 20% of the samples from each group was to be duplicated in later shipments; overall duplication was about 50%. Single analyses were run on the remainder. Duplication was also used to confirm or reject suspect data.

Frequent contacts were made with Omni to review the status of contract work, including methods of analysis, variations in analytical values, their possible causes, and recommendations for correction.

Data Management

Collection and physical composition data were assembled from information furnished on the Fish Data Label (Appendix Figure 2) returned by collectors with each fish. Information that the collector failed to provide was added at College Park (e.g., length and weight of a whole fish), or gathered from a phone call or letter, when possible. Not all the information requested was available for all fishes. Depth of catch and age were seldom available; sex was sometimes available; latitude and longitude of catch were available for approximately half the fishes; date of catch, fish length and weight, and the number of fish were usually available; and some description of the catch location was almost always available. When only the weight of a headed, gutted, or headed and gutted fish was provided, that weight was converted to an estimated round weight.

The collection and physical composition data for each group of samples were then entered on a "history" sheet. If the collector did not send enough fish for 10 samples, as requested, samples composed of fish from similar dates of catch, location, and/or size were grouped together on one "history" sheet. These groups represent pages in the "history" sheet files and were a necessary means of checking the computer tapes.

When the analytical data were received from the contractor, they were entered on a coding form (Appendix Figure 3) with the data from the "history" sheet and were keypunched and entered into the computer. For the latter half of the samples, the contractor entered the analytical data directly on the coding forms.

To check that the data were entered correctly, a cycle of: 1) generate computer printout, 2) check printout for accuracy, 3) correct errors and add new data was repeated several times. Once all the data were in the computer, each group was reviewed using Grubbs' outlier test (paragraph 4.1 of Grubbs 1969) to determine if any values deviated from the group mean more than could be anticipated with normal statistical theory to remove grossly unreasonable lone values as well as to identify periods when values were repeatedly unreasonable. Using this approach, about 1% of the analytical values was determined to be too questionable for use in this report.

The Microconstituent Data Bank, in which the Resource Survey data are stored, is a card-to-tape system with a format similar to the coding form (Appendix Figure 3). It was established in 1973 for the purpose of storage, retrieval, and tabulation of data generated by the Resource Survey and similar studies. Twelve program runs, most with several choices of data breakdown, can be generated with programs presently in the system; Table 5, page 119, is an example of one of these, the MF17 program run. Other programs list species, broken down according to location, and provide a varying depth of detail from 1 to 15 elements. They also provide differing aggregates of history information.

RESULTS

Overview

The Resource Survey provides information on the occurrence of 15 elements in the fishery resource. It covers 204 species taken from 198 sites in 7 areas of U.S. coastal waters. Excluding controls, a total of 9,347 unique samples of 13 different tissues or product forms were analyzed.

The contractor returned approximately 220,000 analytical values of element levels, including replicates but excluding controls. Of these, about 2,900 values were rejected according to the criteria established for data checking. Approximately 37,500 analyses were reported by the contractor as "not detected" or "zero" without reference to detection limits and consequently were not used to determine mean trace element levels.

In a project of this magnitude, invariably some information is lost and a degree of uncertainty introduced into the data as a result of logistical and analytical difficulties encountered during various phases of the work. There were periods during this survey when analytical results reported by the contractor reflected problems of this kind. At times, imprecision in the data could be associated with changes in methodology and analytical procedures. During some periods, many of the samples appeared to have been contaminated with one or more elements. At other times, only occasional unreasonably high values were reported.

When checking data, it is relatively simple to find a single deviant value among the results of many analyses on the same sample or even the same species, i.e., when comparing similar fish. It is generally impossible to distinguish between deviant and acceptable values, however, when few analyses are available. Therefore, there is a much higher chance of reporting an inaccurate value of the mean element content of a species represented by very few samples. Furthermore, if two samples of the same species are analyzed during a period of deviant values, their reported element contents tend to lend credence to each other and, therefore, cannot easily be removed from the data collection, although it is recognized that their inclusion leads to less accurate mean values. Attempts were made, through data checking, to remove all such deviant values.

After reviewing the values received for the control samples as well as the results of the outlier tests, generalizations can be made on the precision of the data. Analytical results on controls for Ag and Mn were very consistent and very few of the values had to be rejected. Controls for Cd were at first reported as zero, but shortly after the contractor changed to a dry ash methodology for this element, the analytical values for controls became very consistent. Very few Cd values were eliminated. Likewise, there were few Hg values discarded; however, there was slightly more variation among the control values for Hg. Zinc showed fairly consistent controls but had occasional abnormally high values overall, with about 1% being rejected, while Ni, Cu, and Se showed more variation in the controls than did Zn but had fewer abnormal values overall. During one short period, Ni and Zn both had a series of abnormal values. Lead and chromium both showed an abundance of zero control values for samples analyzed following wet digestion and erratic standard values for samples that had been dry ashed. There were several periods when almost all of the values for both elements were too high to be included in the mean, based on the outlier test. Approximately 2% of the Pb values and 3% of the Cr values were discarded. The Sn controls showed variability similar to Pb and Cr but with even more periods of high values. About 4% of the Sn values were not used, including almost all of one series of 150 samples. Although only about 1% of the reported As values was discarded, As showed more variation than any other element, with standard deviations approaching the mean value itself. Moreover, As control values became higher shortly after a change from dry ash to wet ash methodology. Results received for Mo, V, and Sb differed greatly within themselves over time. Each had periods when almost all results were reported as ero. When not zero, Sb results showed some degree of eproducibility while Mo and V values were more eratic.

Explanation of Tables

A list of all species analyzed in the Resource Survey is presented in alphabetical order, by common name, in Table 1. The species numbers are those assigned by the College Park Laboratory for use in the Microconstituent Data Bank and are the same as those used in Tables 2, 4, and 5. The first three digits refer to a fish family; the last hree digits refer to a species within that family. The cientific name for each species is also given.

Areas in which the fish were caught, types of tissue nalyzed, and the total number of samples of each pecies in the survey are presented in species number order in Table 2. Some species were captured in more than one area and more than one tissue was sometimes analyzed for one species. Specific tissues taken from a single species were not necessarily analyzed for fish from all listed areas, e.g., black sea bass livers were analyzed only for fish collected from the South Atlantic, although muscle was analyzed for both North and South Atlantic fish.

Table 3 is in 15 parts. Each part presents a summarized view of the levels of one of the elements measured in the Resource Survey, e.g., the distribution of mean mercury level is shown in Table 3.8. The ranges of mean analytical values are broken out separately for each tissue examined. The number of species, the percent of the U.S. commercial and sportfish catch intended for human consumption represented by those species, based on 1970 figures (Deuel 1973; Wheeland 1973), are listed next to the corresponding range. Because Table 3 does not identify species, data on one tissue may not be compared with data on other tissues; Table 4 should be consulted to determine which species fall in a particular range and how many samples of those species were analyzed.

The 15 parts of Table 4 are alphabetical lists of Resource Survey species, showing the distribution of mean elemental levels in the tissues analyzed for each species. The columns on the right correspond to the ranges of mean analytical values listed in Table 3; the range delineating the mean analytical value for a particular tissue of each species is marked accordingly. The two columns of numbers give the total number of samples analyzed and the number of sample values used in calculating the mean; "not detected" or "zero" values were not used in calculating the mean.

Table 5 is an MF17 computer printout for the entire Resource Survey from the Microconstituent Data Bank. Each species is listed separately in species number order. The species numbers are the same as those listed in Table 1 and are found to the right of the scientific name. Within each species, each tissue is listed separately. Sites are one degree squares from a specific area (one by two in Alaska) designating the location of catch according to the map shown in Appendix Figure 1. The mean analytical value is calculated for each unique species-tissue-site combination. If known, length and weight data are tabulated along with the number of samples for which the fish were measured. The mean, standard deviation and range of these lengths and weights are given in meters and kilograms, respectively. This information is followed by the analytical data for each element. Included are the total number of samples from the site, the number of samples in which none of the element was detected ("N Det."), together with the mean, standard deviation and range of all detected analytical values.

It should be noted that some of the species are represented by very few samples and their mean elemental values may not be as reliable as those found for species more extensively sampled. Where there is a high proportion of "not detected" or "zero" values, their exlusion can also give rise to less reliable data by overestimating mean values.

Element Levels

The distribution of mean element levels in Resource Survey species is summarized in Table 3 for the 159 species of finfishes whose muscle was analyzed, 82 species whose liver was analyzed, 17 species of whole finfish, 18 species of Mollusca, and 16 species of Crustacea. The main features of the results are outlined below for each of the elements analyzed.

Antimony (Sb): The mean Sb levels in most finfish muscles and livers fell in the range 0.5-0.9 ppm. Most species of whole finfishes contained Sb levels between 1.0 and 3.0 ppm. Most shellfish species displayed mean Sb levels between 0.8 and 1.0 ppm.

Arsenic (As): The mean As levels showed a wide range of values for finfish muscles and livers, whole finfishes, and Mollusca, with most species falling between 2.0 and 5.0 ppm in each category. Crustacea showed somewhat higher levels, with the largest number of species falling between 4.0 and 5.0 ppm.

Cadmium (Cd): Finfish muscles usually contained less than 0.1 ppm Cd, whereas finfish livers ranged in Cd content up to 30.0 ppm with no apparent mode. The whole finfishes examined generally fell in the range 0.1-0.3 ppm Cd as did Mollusca and Crustacea, with Mollusca showing more variation than the other two.

Chromium (Cr): Except for whole finfishes, the mean Cr levels for most species fell within the range 0.1-0.4 ppm. A range of 0.2-0.6 ppm Cr was found for the majority of the whole finfishes analyzed.

Copper (Cu): There is a significant difference in mean Cu levels between finfish muscles and livers. The muscles ranged from 0.1 to 2.0 ppm Cu, with most species falling between 0.2 and 0.5 ppm. On the other hand, livers ranged from 1.0-110.0 ppm, with no apparent mode. Although no pattern could be discerned for whole finfishes and shellfishes, much higher Cu levels were found in the shellfishes.

Lead (Pb): The mean Pb levels in the majority of species were found to fall in the following ranges: finfish muscles, 0.3-0.7 ppm; finfish livers, 0.2-0.6 ppm; Mollusca and Crustacea, 0.5-0.8 ppm. No pattern was observed for mean Pb levels in whole finfishes.

Manganese (Mn): Mean Mn levels in finfish muscles and livers ranged up to 2.0 ppm, with muscles usually below 0.3 ppm and livers usually above 0.6 ppm. Whole finfishes exhibited a mode in the range 1.0-2.0 ppm Mn.

Mercury (Hg): Most finfish muscles had mean Hg levels below 0.3 ppm and only 31 species were found to contain mean Hg levels above the FDA action level of 0.5 ppm. However, these 31 species represent only one percentage point of the 63.9% of the catch intended for consumption represented by the 159 species analyzed. Extrapolation of these results indicates that, in fact, less than 2% of the U.S. catch intended for consumption may be in excess of the action level. Of the 31 species above 0.5 ppm Hg, 10 are sharks and 4 are billfishes. Livers generally showed slightly higher Hg levels than muscle samples. All species of whole finfishes had mean Hg levels below 0.3 ppm. Likewise, Crustacea had mean levels less than 0.3 ppm Hg and Mollusca were all below 0.1 ppm.

Molybdenum (Mo): The mean Mo levels for the majority of finfish muscles and livers, whole finfishes and Mollusca, and all the Crustacea ranged from< 0.1 to 0.4 ppm Mo.

Nickel (Ni): The distributions for Ni are similar to those found for Cr. The mean Ni levels in finfish muscles and livers ranged from 0.1 to 0.3 ppm for most species. The majority of the whole finfishes were between 0.3 and 0.5 ppm Ni. For most of the Crustacea the range of mean Ni levels was 0.2-0.4 ppm.

Selenium (Se): With the exception of finfish livers, no mean Se values were greater than 2.0 ppm. For finfish muscles, the mean level in the majority of species ranged from 0.4 to 0.9 ppm Se. Finfish livers showed a greatly extended range of 0.6-30.0 ppm, with the majority between 1.0 and 3.0 ppm.

Silver (Ag): Finfish muscles contained mean levels less than 0.1 ppm Ag for all but one specimen examined. The majority of the species in the other categories were likewise below 0.1 ppm Ag, although livers ranged up to 0.6 ppm, whole finfishes to 0.2 ppm, Mollusca to 0.7 ppm, and Crustacea up to 0.5 ppm.

Tin (Sn): The ranges of mean Sn levels for most species were 0.4-0.8 ppm for muscles and 0.3-0.7 ppm for livers. Most of the whole finfishes contained 1.0-2.0 ppm Sn.

Vanadium (V): The mean V levels of finfish muscles and livers were below 0.5 ppm for most species, although livers tended to be higher than muscles. Most whole finfishes had mean values of V less than 0.8 ppm. Vanadium levels in most shellfishes fell between 0.2 and 0.5 ppm.

Zinc (Zn): The distributions for Zn are similar to those found for Cu, although the values are higher. Muscles ranged from 2.0 to 20.0 ppm, with the majority of species falling in the range 3.0-6.0 ppm, whereas livers ranged from 4.0 to 700.0 ppm, with the majority of species in the range 10.0-40.0 ppm Zn.

CONCLUDING REMARKS

The completion of this data report does not bring the Resource Survey to an end. No attempt has been made here, for example, to compare element levels in a particular species or to investigate possible relationships between element levels and fish location, size, or sex. The analytical values have been summarized by site only for each species and tissue, and very little of the history of the fish has been presented. Many of the data not made available here will be presented in the form of detailed data reports. Two such reports currently in preparation present trace element levels in fishes and shellfishes taken from the New York Bight and adjacent waters, and in sharks caught in U.S. waters. The complete collection of data is available for use in interpretive studies. It is also anticipated that the data will be made available to the public, in the future, through the National Oceanographic Data Center, Environmental Data Service, National Oceanic and Atmospheric Administration, Rockville, Md.

This work represents an essential first step towards a better understanding of possible constraints that may be placed upon the safe and economic utilization of the Nation's fishery resource due to contamination by trace elements. It provides a broad view of the occurrence of 15 elements and contains baseline information that should be of assistance in planning future, more detailed investigations of trace element levels in selected species of fishes and shellfishes. Several such in-depth studies are currently underway on species revealed to be relatively high in one or more elements. Some underutilized species are also being studied in depth because of their potential commercial value, not necessarily because they are known to be high in any element. Other surveys of this kind are being undertaken in locations believed to be polluted. Elements selected for detailed investigations include those found in toxic form and those believed to offset the toxic effects of others through chemical or biochemical interactions. In the long term, the ability to distinguish between toxic and relatively harmless contaminants would be extremely valuable from a public health standpoint and in assisting efficient management of the fishery resource.

ACKNOWLEDGMENTS

This has been a cooperative project involving sample collection by NMFS's many field laboratories and statistical agents; sample preparation by the College Park and Seattle NMFS laboratories; chemical analysis by a contractor in Puerto Rico; and sample packaging and shipping, review of the raw experimental data, data management, and preliminary and final data report preparation by the College Park Laboratory. Thanks are due to all NMFS personnel who assisted with fish collection; E. Gauglitz and other members of the Seattle staff who participated in sample preparation; College Park personnel involved in sample preparation and data handling, especially J. Powell for supervising the collection of fish and preparation of samples, and T. Chambers and S. Nealis for their part in checking data and assembling tables; G. Moyer of NOAA/OMCS for his contribution in creating and maintaining the Microconstituents Data Bank; and G. Knobl and H. Seagran, past and present Directors of the College Park Laboratory, for their valuable comments and suggestions throughout the course of this work.

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Table 1.—Alphabetical list of species analyzed in the Resource Survey.

Common name	Species number	Scientific name
Abalone, green	187-005	*Haliotis fulgens*
Abalone, red	187-008	*Haliotis rufescens*
Alewife	078-005	*Alosa pseudoharengus*
Anchovy, northern	001-016	*Engraulis mordax*
Anchovy, striped	001-006	*Anchoa hepsetus*
Argentine, Atlantic	002-002	*Argentina silus*
Ballyhoo	062-014	*Hemiramphus brasiliensis*
Barracuda, Atlantic	005-002	*Sphyraena barracuda*
Barracuda, Pacific	005-001	*Sphyraena argentea*
Bass, black sea	006-006	*Centropristis striata*
Bass, striped	007-004	*Morone saxatilis*
Bluefish	012-001	*Pomatomus saltatrix*
Bonito, Atlantic	091-011	*Sarda sarda*
Bonito, Pacific	091-009	*Sarda chiliensis*
Bullhead, brown	021-007	*Ictalurus nebulosus*
Butterfish	018-014	*Peprilus triacanthus*
Catfish, channel	021-010	*Ictalurus punctatus*
Catfish, gafftopsail	023-002	*Bagre marinus*
Catfish, sea	023-001	*Arius felis*
Catfish, white	021-002	*Ictalurus catus*
Clam, butter	191-003	*Saxidomus gigantea*
Clam, hard (quahog)	191-001	*Mercenaria mercenaria*
Clam, Pacific littleneck	191-008	*Protothaca staminea*
Clam, razor	243-002	*Siliqua patula*
Clam, soft	242-001	*Mya arenaria*
Clam, surf	244-005	*Spisula solidissima*
Cod, Atlantic	033-008	*Gadus morhua*
Cod, Pacific (gray)	033-007	*Gadus macrocephalus*
Crab, blue	196-001	*Callinectes sapidus*
Crab, Dungeness	196-011	*Cancer magister*
Crab, king	196-012	*Paralithodes camschatica*
Crab, red, deep sea	196-006	*Geryon quinquedens*
Crab, rock	196-003	*Cancer erroratus*
Crab, tanner (bairdi)	196-035	*Chionoecetes bairdi*
Croaker, Atlantic	045-026	*Micropogon undulatus*
Cusk	033-004	*Brosme brosme*
Cusk-eel, fawn	037-004	*Lepophidium cervinum*
Dogfish, smooth	145-018	*Mustelus canis*
Dogfish, spiny	141-007	*Squalus acanthias*
Dolphin	040-002	*Coryphaena hippurus*
Drum, banded	045-019	*Larimus fasciatus*
Drum, black	045-028	*Pogonias cromis*
Drum, red	045-030	*Sciaenops ocellata*
Eel, American	051-001	*Anguilla rostrata*
Eel, conger	047-002	*Conger oceanicus*
Eulachon	153-009	*Thaleichthys pacificus*
Flounder, fourspot	058-028	*Paralichthys oblongus*
Flounder, Gulf	058-024	*Paralichthys albigutta*
Flounder, southern	058-027	*Paralichthys lethostigma*
Flounder, summer (fluke)	058-026	*Paralichthys dentatus*
Flounder, windowpane (s. dab)	058-030	*Scophthalmus aquosus*
Flounder, winter	059-030	*Pseudopleuronectes americanus*
Flounder, witch	059-005	*Glyptocephalus cynoglossus*
Flounder, yellowtail	059-016	*Limanda ferruginea*
Gag	006-040	*Mycteroperca microlepis*
Goatfish	066-009	*Mulloidichtys samoensis*
Goosefish	068-001	*Lophius americanus*
Grouper, black	006-037	*Mycteroperca bonaci*
Grouper, red	006-017	*Epinephelus morio*
Grouper, yellowmouth	006-038	*Mycteroperca interstitialis*
Grunt, bluestriped (yellow)	073-015	*Haemulon sciurus*
Grunt, white	073-014	*Haemulon plumieri*
Haddock	033-011	*Melanogrammus aeglefinus*
Hake, Pacific	033-013	*Merluccius productus*
Hake, red	033-020	*Urophycis chuss*
Hake, silver (whiting)	033-012	*Merluccius bilinearis*
Hake, spotted	033-024	*Urophycis regius*
Hake, white	033-025	*Urophycis tenuis*
Halibut, Pacific	059-011	*Hippoglossus stenolepis*
Hammerhead, scalloped	143-001	*Sphyrna lewini*

Table 1.—Alphabetical list of species analyzed in the Resource Survey.—*Continued.*

Common name	Species number	Scientific name
Hammerhead, smooth	143-005	*Sphyrna zygaena*
Harvestfish	018-011	*Peprilus alepidotus*
Herring, Atlantic	078-011	*Clupea harengus harengus*
Herring, blueback	078-001	*Alosa aestivalis*
Herring, Pacific	078-012	*Clupea harengus pallasi*
Herring, round	078-015	*Etrumeus teres*
Hind, speckled	006-013	*Epinephelus drummondhayi*
Jack (mackerel scad)	079-068	*Decapterus pinnulatus*
Jack, akule	079-053	*Trachurops crumenopthalmus*
Jack, crevalle	079-005	*Caranx hippos*
Jack, crevalle (Hawaii)	079-069	*Caranx melampygus*
Jacksmelt	149-004	*Atherinopsis californiensis*
Jewfish	006-016	*Epinephelus itajara*
Kingfish, northern	045-024	*Menticirrhus saxatilis*
Kingfish, southern	045-021	*Menticirrhus americanus*
Ladyfish	200-002	*Elops saurus*
Lingcod	071-005	*Ophiodon elongatus*
Lobster, northern (American)	194-012	*Homarus americanus*
Lobster, spiny (Atlantic)	194-002	*Panulirus argus*
Lobster, spiny (Pacific)	194-003	*Panulirus interruptus*
Mackerel, Atlantic	091-013	*Scomber scombrus*
Mackerel, chub	091-012	*Scomber japonicus*
Mackerel, jack	079-034	*Trachurus symmetricus*
Mackerel, king	091-014	*Scomberomorus cavalla*
Mackerel, Spanish	091-016	*Scomberomorus maculatus*
Mako, shortfin	144-003	*Isurus oxyrinchus*
Marlin, blue	011-002	*Makaira nigricans*
Marlin, striped	011-005	*Tetrapturus audax*
Marlin, white	011-003	*Tetrapturus albidus*
Mempachi	162-012	*Myripristis argyromus*
Menhaden, Atlantic	078-010	*Brevoortia tyrannus*
Menhaden, Gulf	078-008	*Brevoortia patronus*
Menhaden, yellowfin	078-009	*Brevoortia smithi*
Milkfish	206-001	*Chanos chanos*
Mojarra, yellowfin	094-010	*Gerres cinereus*
Mullet, silver (white)	098-003	*Mugil curema*
Mullet, striped	098-002	*Mugil cephalus*
Octopus (marmuratus)	205-001	*Polypus marmuratus*
Oyster, eastern	189-001	*Crassostrea virginica*
Oyster, Pacific (giant)	189-002	*Crassostrea gigas*
Palometa	079-030	*Trachinotus goodei*
Perch, ocean (Pacific)	131-023	*Sebastes alutus*
Perch, ocean (redfish)	131-052	*Sebastes marinus*
Perch, sand	006-010	*Diplectrum formosum*
Perch, shiner	168-005	*Cymatogaster aggregata*
Perch, silver	045-003	*Bairdiella chrysura*
Perch, white	007-001	*Morone americana*
Permit	079-029	*Trachinotus falcatus*
Pigfish	073-017	*Orthopristis chrysoptera*
Pinfish, spottail	114-013	*Diplodus holbrooki*
Plaice, American (dab)	059-008	*Hippoglossoides platessoides*
Pollock	033-017	*Pollachius virens*
Pollock, walleye (Alaska)	033-019	*Theragra chalcogramma*
Pompano, Florida	079-028	*Trachinotus carolinus*
Porgy, red	114-014	*Pagrus sedecim*
Pout, ocean	056-018	*Macrozoarces americanus*
Rockfish, bocaccio	131-061	*Sebastes paucispinis*
Rockfish, canary	131-063	*Sebastes pinniger*
Rockfish, copper	131-031	*Sebastes caurinus*
Rockfish, yellowtail	131-043	*Sebastes flavidus*
Runner, blue	079-004	*Caranx crysos*
Sablefish	126-001	*Anoplopoma fimbria*
Sailfish	011-001	*Istiophorus platypterus*
Salmon, chinook (king)	179-020	*Oncorhynchus tshawytscha*
Salmon, chum (keta)	179-017	*Oncorhynchus keta*
Salmon, coho (silver)	179-018	*Oncorhynchus kisutch*
Salmon, pink	179-016	*Oncorhynchus gorbuscha*
Salmon, sockeye (red)	179-019	*Oncorhynchus nerka*
Scad, round	079-013	*Decapterus punctatus*
Scallop, Atlantic bay	190-014	*Aequipecten irradians*

Table 1.—Alphabetical list of species analyzed in the Resource Survey.—*Continued.*

Common name	Species number	Scientific name
Scallop, calico	190-016	*Aequipecten gibbus*
Scallop, pink	190-028	*Chlamys hericius*
Scallop, sea (smooth)	190-013	*Placopecten magellanicus*
Scamp	006-041	*Mycteroperca phenax*
Sculpin, longhorn	132-031	*Myoxocephalus octodecemspinosus*
Scup	114-016	*Stenotomus chrysops*
Searobin, northern	135-010	*Prionotus carolinus*
Searobin, striped	135-011	*Prionotus evolans*
Seatrout, gray (weakfish)	045-012	*Cynoscion regalis*
Seatrout, sand	045-007	*Cynoscion arenarius*
Seatrout, silver (white)	045-010	*Cynoscion nothus*
Seatrout, spotted (speckled)	045-008	*Cynoscion nebulosus*
Shad, American	078-006	*Alosa sapidissima*
Shark, Atlantic sharpnose	145-025	*Rhizoprionodon terraenovae*
Shark, blacktip	145-006	*Carcharhinus limbatus*
Shark, blue	145-023	*Prionace glauca*
Shark, dusky	145-010	*Carcharhinus obscurus*
Shark, sandbar	145-009	*Carcharhinus milberti*
Shark, white	144-001	*Carcharodon carcharias*
Sheepshead	114-001	*Archosargus probatocephalus*
Shrimp, Alaska (sidestripe)	192-012	*Pandalopsis dispar*
Shrimp, brown	192-005	*Penaeus aztecus*
Shrimp, ocean	192-007	*Pandalus jordani*
Shrimp, pink	192-010	*Penaeus duorarum*
Shrimp, pink (northern)	192-011	*Pandalus borealis*
Shrimp, royal red	192-003	*Hymenopenaeus robustus*
Shrimp, white	192-004	*Penaeus setiferus*
Skate, little	150-005	*Raja erinacea*
Skate, winter	150-012	*Raja ocellata*
Snapper, blackfin	155-005	*Lutjanus buccanella*
Snapper, gray	155-025	*Aprion virescens*
Snapper, gray (mangrove)	155-008	*Lutjanus griseus*
Snapper, red	155-006	*Lutjanus campechanus*
Snapper, red (ehu)	155-024	*Etelis marchi*
Snapper, vermilion	155-015	*Rhomboplites aurorubens*
Snapper, yellowtail	155-013	*Ocyurus chrysurus*
Snook	157-004	*Centropomus undecimalis*
Sole, Dover	059-021	*Microstomus pacificus*
Sole, English	059-022	*Parophrys vetulus*
Sole, petrale	059-004	*Eopsetta jordani*
Sole, rex	059-006	*Glyptocephalus zachirus*
Sole, rock	059-014	*Lepidopsetta bilineata*
Spearfish, shortbill	011-004	*Tetrapturus angustirostris*
Spot	045-020	*Leiostomus xanthurus*
Squid, Atlantic longfinned	188-003	*Loligo pealii*
Squid, Pacific	188-006	*Loligo opalescens*
Squid, shortfinned	188-014	*Illex illecebrosus*
Sturgeon, green	166-003	*Acipenser medirostris*
Surfperch, barred	168-001	*Amphistichus argenteus*
Tarpon	200-003	*Megalops atlantica*
Tautog	185-022	*Tautoga onitis*
Tilefish	174-003	*Lopholatilus chamaeleonticeps*
Trout, cutthroat	179-028	*Salmo clarki*
Trout, rainbow (steelhead)	179-029	*Salmo gairdneri*
Tuna, albacore	091-019	*Thunnus alalunga*
Tuna, bigeye	091-022	*Thunnus obesus*
Tuna, blackfin	091-021	*Thunnus atlanticus*
Tuna, bluefin	091-023	*Thunnus thynnus*
Tuna, skipjack	091-008	*Katsuwonus pelamis*
Tuna, yellowfin	091-020	*Thunnus albacares*
Tunny, little	091-006	*Euthynnus alletteratus*
Wahoo	091-001	*Acanthocybium solanderi*
Wolffish, Atlantic	183-002	*Anarhichas lupus*
Yellowtail	079-023	*Seriola dorsalis*

Table 2. Resource Survey: Areas of Catch, Tissues Analyzed, and Number of Samples Analyzed; by Species

Species Number	Species Name	Areas of Catch	Tissues Analyzed	No. of Samples
001-006	Anchovy, striped	Gulf of Mexico	headed & gutted	40
001-016	Anchovy, northern	California	whole	40
002-002	Argentine, Atlantic	N. Atlantic	headed & gutted	7
005-001	Barracuda, Pacific	California	muscle	20
005-002	Barracuda, Atlantic	Gulf of Mexico	muscle	7
006-006	Bass, black sea	N. & S. Atlantic	muscle, liver	57
006-010	Perch, sand	S. Atlantic	muscle	1
006-013	Hind, speckled	S. Atlantic	muscle, liver	27
006-016	Jewfish	Gulf of Mexico	muscle	8
006-017	Grouper, red	Gulf of Mexico	muscle	41
006-037	Grouper, black	Gulf of Mexico	muscle	34
006-038	Grouper, yellowmouth	S. Atlantic	muscle, liver	11
006-040	Gag	Gulf of Mexico	muscle	30
006-041	Scamp	S. Atlantic	muscle, liver	11
007-001	Perch, white	N. Atlantic	muscle, headed & gutted	46
007-004	Bass, striped	N. Atlantic, California, Northwest	muscle, liver	120
011-001	Sailfish	N. & S. Atlantic, Gulf of Mexico	muscle, liver	46
011-002	Marlin, blue	N. & S. Atlantic, Hawaii	muscle, liver	44
011-003	Marlin, white	N. & S. Atlantic, Gulf of Mexico	muscle, liver	65
011-004	Spearfish, shortbill	Hawaii	muscle, liver	19
011-005	Marlin, striped	Hawaii	muscle, liver	49
012-001	Bluefish	N. & S. Atlantic, Gulf of Mexico	muscle, liver	77
018-011	Harvestfish	N. & S. Atlantic	muscle, whole	19
018-014	Butterfish	N. Atlantic	muscle, whole, headed & gutted	90
021-002	Catfish, white	N. Atlantic	muscle	1
021-007	Bullhead, brown	N. Atlantic	muscle	4
021-010	Catfish, channel	N. Atlantic	muscle	20
023-001	Catfish, sea	Gulf of Mexico	muscle, liver	53
023-002	Catfish, gafftopsail	Gulf of Mexico	muscle, liver	37
033-004	Cusk	N. Atlantic	muscle, liver	94
033-007	Cod, Pacific (gray)	Northwest, Alaska	muscle, liver	75
033-008	Cod, Atlantic	N. Atlantic	muscle, liver	150
033-011	Haddock	N. Atlantic	muscle, liver, whole	96
033-012	Hake, silver (whiting)	N. Atlantic	muscle, liver	86
033-013	Hake, Pacific	California, Northwest	muscle, liver	50
033-017	Pollock	N. Atlantic	muscle, liver	106
033-019	Pollock, walleye (Alaska)	Northwest, Alaska	muscle, liver	51
033-024	Hake, red	N. Atlantic	muscle	65
033-024	Hake, spotted	N. Atlantic	muscle	65
033-025	Hake, white	N. Atlantic	muscle, liver	101
037-004	Cusk-eel, fawn	N. Atlantic	muscle	2
041-002	Dolphin	S. Atlantic, Gulf of Mexico, Hawaii	muscle, liver	91
045-003	Perch, silver	S. Atlantic	muscle	20
045-007	Seatrout, sand	Gulf of Mexico	muscle	18
045-008	Seatrout, spotted (speckled)	N. & S. Atlantic, Gulf of Mexico	muscle, liver	92
045-010	Seatrout, silver (white)	Gulf of Mexico	muscle, liver	45
045-012	Seatrout, gray (weakfish)	N. & S. Atlantic	muscle, liver, whole	85
045-019	Drum, banded	N. & S. Atlantic	muscle	5
045-020	Spot	N. & S. Atlantic	muscle	54
045-021	Kingfish, southern	Gulf of Mexico	muscle, liver	15
045-024	Kingfish, northern	N. Atlantic	muscle	6
045-026	Croaker, Atlantic	N. & S. Atlantic, Gulf of Mexico	muscle	92
045-028	Drum, black	Gulf of Mexico	muscle, liver	63
045-030	Drum, red	N. & S. Atlantic, Gulf of Mexico	muscle, liver	76
047-002	Eel, conger	N. Atlantic	muscle	1
051-001	Eel, American	N. Atlantic	muscle	30
056-018	Pout, ocean	N. Atlantic	muscle, liver	37
058-024	Flounder, Gulf	Gulf of Mexico	muscle, liver	42
058-026	Flounder, summer (fluke)	S. Atlantic	muscle, liver	44
058-027	Flounder, southern	S. Atlantic, Gulf of Mexico	muscle, liver	44
058-028	Flounder, fourspot	N. Atlantic	muscle	71
058-030	Flounder, windowpane (s. dab)	N. Atlantic	muscle	18
059-004	Sole, petrale	California, Northwest	muscle, liver	64
059-005	Flounder, witch	N. Atlantic	muscle	71
059-006	Sole, rex	California, Northwest	muscle	61
059-008	Plaice, American (dab)	N. Atlantic	muscle	69
059-011	Halibut, Pacific	Northwest, Alaska	muscle, liver	53
059-014	Sole, rock	Northwest	muscle	10
059-016	Flounder, yellowtail	N. Atlantic	muscle, liver	91
059-021	Sole, Dover	California, Northwest	muscle, liver	74
059-022	Sole, English	California, Northwest	muscle, liver	78
059-030	Flounder, winter	N. Atlantic	muscle, liver	125
062-014	Ballyhoo	S. Atlantic	whole	58
066-009	Goatfish	Hawaii	muscle	40
068-001	Goosefish	N. Atlantic	muscle, liver, headed & gutted	92

Table 2. Resource Survey: Areas of Catch, Tissues Analyzed, and Number of Samples Analyzed; by Species (cont'd)

Species Number	Species Name	Areas of Catch	Tissues Analyzed	No. of Samples
071-005	Lingcod	California, Northwest	muscle, liver	91
073-014	Grunt, white	S. Atlantic, Gulf of Mexico	muscle	17
073-015	Grunt, bluestriped (yellow)	S. Atlantic, Gulf of Mexico	muscle	16
073-017	Pigfish	N. & S. Atlantic	muscle	34
078-001	Herring, blueback	N. Atlantic	whole	1
078-005	Alewife	N. Atlantic	muscle, whole	47
078-006	Shad, American	N. Atlantic, Northwest	muscle	60
078-008	Menhaden, Gulf	Gulf of Mexico	muscle, whole, gutted	87
078-009	Menhaden, yellowfin	Gulf of Mexico	whole	13
078-010	Menhaden, Atlantic	N. & S. Atlantic	muscle, whole	111
078-011	Herring, Atlantic	N. Atlantic	muscle, whole, headed, headed & gutted	95
078-012	Herring, Pacific	Northwest, Alaska	muscle, whole	44
078-015	Herring, round	N. Atlantic	headed & gutted	50
079-004	Runner, blue	Gulf of Mexico	muscle, liver	60
079-005	Jack, crevalle	Gulf of Mexico	muscle, liver	53
079-013	Scad, round	S. Atlantic	headed & gutted	3
079-023	Yellowtail	California	muscle	24
079-028	Pompano, Florida	S. Atlantic, Gulf of Mexico	muscle, liver	65
079-029	Permit	S. Atlantic	muscle	9
079-030	Palometa	S. Atlantic	muscle	2
079-034	Mackerel, jack	California	muscle, liver, headed	15
079-053	Jack, akule	Hawaii	muscle	39
079-068	Jack, (mackerel scad)	Hawaii	muscle	40
079-069	Jack, crevalle (Hawaii)	Hawaii	muscle	40
091-001	Wahoo	Gulf of Mexico, Hawaii	muscle, liver	21
091-006	Tunny, little	Gulf of Mexico	muscle, liver	52
091-008	Tuna, skipjack	California, Hawaii, Pacific	muscle, liver	78
091-009	Bonito, Pacific	California	muscle, liver	41
091-011	Bonito, Atlantic	Gulf of Mexico	muscle	15
091-012	Mackerel, chub	California	muscle	30
091-013	Mackerel, Atlantic	N. Atlantic	muscle	80
091-014	Mackerel, king	S. Atlantic, Gulf of Mexico	muscle, liver, milt, roe	129
091-016	Mackerel, Spanish	S. Atlantic, Gulf of Mexico	muscle, liver	113
091-019	Tuna, albacore	California, Northwest	muscle, liver	45
091-020	Tuna, yellowfin	California, Hawaii	muscle, liver	106
091-021	Tuna, blackfin	Gulf of Mexico	muscle	1
091-022	Tuna, bigeye	Hawaii	muscle, liver	61
091-023	Tuna, bluefin	N. Atlantic, California	muscle, liver	12
094-010	Mojarra, yellowfin	S. Atlantic	muscle	10
098-002	Mullet, striped	S. Atlantic, Gulf of Mexico, Hawaii	muscle, liver	163
098-003	Mullet, silver (white)	S. Atlantic, Gulf of Mexico	muscle	36
114-001	Sheepshead	Gulf of Mexico	muscle, liver	62
114-013	Pinfish, spottail	S. Atlantic	muscle, liver	11
114-014	Porgy, red	S. Atlantic	muscle, liver	23
114-016	Scup	N. & S. Atlantic	muscle	72
126-001	Sablefish	California, Northwest, Alaska	muscle, liver	118
131-023	Perch, ocean (Pacific)	Northwest	muscle, liver	48
131-031	Rockfish, copper	Northwest	muscle	10
131-043	Rockfish, yellowtail	Northwest	muscle	20
131-052	Perch, ocean (redfish)	N. Atlantic	muscle, liver	82
131-061	Rockfish, bocaccio	California, Northwest	muscle, liver	52
131-063	Rockfish, canary	California, Northwest	muscle, liver	46
132-031	Sculpin, longhorn	N. Atlantic	muscle	1
135-010	Searobin, northern	N. & S. Atlantic	muscle	78
135-011	Searobin, striped	N. Atlantic	muscle	10
141-007	Dogfish, spiny	N. & S. Atlantic, Northwest	muscle, liver	144
143-001	Hammerhead, scalloped	N. & S. Atlantic	muscle	12
143-005	Hammerhead, smooth	S. Atlantic	muscle, liver	17
144-001	Shark, white	N. Atlantic	muscle	2
144-003	Mako, shortfin	N. Atlantic	muscle, liver	5
145-006	Shark, blacktip	S. Atlantic, Gulf of Mexico	muscle, liver	20
145-009	Shark, sandbar	N. Atlantic, Gulf of Mexico	muscle, liver	20
145-010	Shark, dusky	N. & S. Atlantic, Gulf of Mexico	muscle	4
145-018	Dogfish, smooth	N. Atlantic	muscle	95
145-023	Shark, blue	N. Atlantic	muscle, liver	23
145-025	Shark, Atlantic sharpnose	S. Atlantic	muscle	1
149-004	Jacksmelt	California	whole	20
150-005	Skate, little	N. Atlantic	muscle, liver	56
150-012	Skate, winter	N. Atlantic	muscle, liver	3
153-009	Eulachon	Northwest	whole	33
155-005	Snapper, blackfin	Gulf of Mexico	muscle	13
155-006	Snapper, red	S. Atlantic, Gulf of Mexico	muscle	38
155-008	Snapper, gray (mangrove)	S. Atlantic, Gulf of Mexico	muscle	28
155-013	Snapper, yellowtail	S. Atlantic, Gulf of Mexico	muscle	43
155-015	Snapper, vermilion	S. Atlantic	muscle, liver	38
155-024	Snapper, red (ehu)	Hawaii	muscle	40
155-025	Snapper, gray	Hawaii	muscle	40

Table 2. Resource Survey: Areas of Catch, Tissues Analyzed, and Number of Samples Analyzed; by Species (cont'd)

Species Number	Species Name	Areas of Catch	Tissues Analyzed	No. of Samples
157-004	Snook	Gulf of Mexico	muscle	12
162-012	Mempachi	Hawaii	muscle, liver	21
166-003	Sturgeon, green	Northwest	muscle	10
168-001	Surfperch, barred	California	muscle	20
168-005	Perch, shiner	California	whole	2
174-003	Tilefish	Gulf of Mexico	muscle	60
179-016	Salmon, pink	Alaska	muscle, liver	32
179-017	Salmon, chum (keta)	Northwest, Alaska	muscle, liver	62
179-018	Salmon, coho (silver)	Northwest, Alaska	muscle, liver	76
179-019	Salmon, sockeye (red)	Northwest, Alaska	muscle, liver	66
179-020	Salmon, chinook (king)	California, Northwest, Alaska	muscle, liver	132
179-028	Trout, cutthroat	Northwest	muscle	3
179-029	Trout, rainbow (steelhead)	Northwest	muscle, liver	10
183-002	Wolffish, Atlantic	N. Atlantic	muscle, liver	75
185-022	Tautog	N. Atlantic	muscle	14
187-005	Abalone, green	California	shucked	10
187-008	Abalone, red	California	shucked	10
188-003	Squid, Atlantic longfinned	N. Atlantic	whole, mantle	133
188-006	Squid, Pacific	California	whole	50
188-014	Squid, Atlantic shortfinned	N. Atlantic	mantle	92
189-001	Oyster, eastern	N. & S. Atlantic, Gulf of Mexico	shucked	153
189-002	Oyster, Pacific (giant)	California, Northwest	shucked	70
190-013	Scallop, sea (smooth)	N. Atlantic	adductor muscle	11
190-014	Scallop, Atlantic bay	S. Atlantic	adductor muscle	20
190-016	Scallop, calico	S. Atlantic	shucked, adductor muscle	30
190-028	Scallop, pink	Alaska	adductor muscle	5
191-001	Clam, hard (quahog)	N. & S. Atlantic	shucked	141
191-003	Clam, butter	Northwest	shucked	29
191-008	Clam, Pacific littleneck	Alaska	shucked	1
192-003	Shrimp, royal red	S. Atlantic	peeled tail	12
192-004	Shrimp, white	S. Atlantic, Gulf of Mexico	peeled tail	77
192-005	Shrimp, brown	Gulf of Mexico	peeled tail	53
192-007	Shrimp, ocean	Northwest	peeled tail	10
192-010	Shrimp, pink	Gulf of Mexico	peeled tail	50
192-011	Shrimp, pink (northern)	N. Atlantic, Alaska	peeled tail	64
192-012	Shrimp, Alaska (sidestripe)	Alaska	peeled tail	17
194-002	Lobster, spiny (Atlantic)	S. Atlantic, Gulf of Mexico	tailmeat	40
194-003	Lobster, spiny (Pacific)	California	tailmeat	5
194-012	Lobster, northern (American)	N. Atlantic	body, claw, tail, leg meat	88
196-001	Crab, blue	N. & S. Atlantic, Gulf of Mexico	body meat, claw meat	94
196-003	Crab, rock	N. Atlantic	meat	15
196-006	Crab, red, deep sea	N. Atlantic	meat	25
196-011	Crab, dungeness	California, Northwest, Alaska	meat, claw & body meat	50
196-012	Crab, king	Alaska	meat, claw & body meat	29
196-035	Crab, tanner (bairdi)	Alaska	meat	50
200-002	Ladyfish	Gulf of Mexico	muscle	2
200-003	Tarpon	Gulf of Mexico	muscle, liver	14
205-001	Octopus (marmuratus)	Hawaii	whole, mantle	40
206-001	Milkfish	Hawaii	muscle	40
242-001	Clam, soft	N. Atlantic	shucked	19
243-002	Clam, razor	Northwest, Alaska	shucked	39
244-005	Clam, surf	N. Atlantic	shucked	23

Table 3.1. Summarized Distribution of Mean Antimony Levels in Resource Survey Species

Range, ppm[1/]	No. of Species	Percent of[2/] U. S. Catch	Percent of U. S. Catch[2/] Intended for Human Consumption
Finfish, muscle			
< 0.1	5	*[3/]	*
0.1 to 0.2	1	12.5	*
0.3 to 0.4	2	*	*
0.4 to 0.5	2	*	*
0.5 to 0.6	18	2.4	3.6
0.6 to 0.7	51	8.8	17.3
0.7 to 0.8	33	8.7	14.9
0.8 to 0.9	28	36.6	26.0
0.9 to 1.0	9	0.8	1.7
1.0 to 2.0	10	0.7	10.5
TOTAL:	159	70.5	63.9
Finfish, liver			
< 0.1	3	0.4	0.7
0.1 to 0.2	2	0.2	*
0.2 to 0.3	1	0.1	0.2
0.3 to 0.4	5	0.3	0.6
0.4 to 0.5	8	3.3	6.6
0.5 to 0.6	20	8.8	18.2
0.6 to 0.7	9	2.4	4.9
0.7 to 0.8	11	8.7	16.7
0.8 to 0.9	6	1.7	3.6
0.9 to 1.0	6	0.3	0.7
1.0 to 2.0	11	2.0	4.1
TOTAL:	82	28.3	56.3
Finfish, whole			
< 0.1	1	0.5	1.1
0.1 to 0.2	1	*	*
0.3 to 0.4	1	0.1	0.1
1.0 to 2.0	9	3.5	3.0
2.0 to 3.0	5	41.3	*
TOTAL:	17	45.4	4.3

Table 3.1. Summarized Distribution of Mean Antimony Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
< 0.1	3	1.6	3.4
0.5 to 0.6	2	0.2	0.4
0.6 to 0.7	1	0.5	0.6
0.7 to 0.8	2	0.1	0.1
0.8 to 0.9	2	0.9	1.9
0.9 to 1.0	5	0.5	1.1
1.0 to 2.0	3	*[3]	*
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
0.2 to 0.3	2	*	0.1
0.7 to 0.8	1	*	*
0.8 to 0.9	3	4.2	8.7
0.9 to 1.0	7	5.7	11.7
1.0 to 2.0	3	3.8	7.8
TOTAL:	16	13.7	28.4

1/ Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

2/ See page 12 for an explanation of these columns.

3/ * denotes less than .05%.

Table 3.2. Summarized Distribution of Mean Arsenic Levels in Resource Survey Species

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, muscle			
0.6 to 0.7	1	0.1	0.2
1.0 to 2.0	8	1.8	2.6
2.0 to 3.0	47	30.3	35.0
3.0 to 4.0	35	31.4	13.8
4.0 to 5.0	18	2.1	3.0
5.0 to 6.0	7	1.5	2.8
6.0 to 7.0	7	0.2	0.3
7.0 to 8.0	9	2.5	5.0
8.0 to 9.0	7	0.1	0.1
9.0 to 10.0	6	0.1	0.2
10.0 to 20.0	12	0.4	0.7
20.0 to 30.0	2	0.1	0.2
TOTAL:	159	70.5	63.9
Finfish, liver			
0.7 to 0.8	1	* [3]	*
1.0 to 2.0	9	7.3	15.0
2.0 to 3.0	12	5.4	9.7
3.0 to 4.0	13	0.7	1.0
4.0 to 5.0	14	7.4	15.3
5.0 to 6.0	9	5.4	10.8
6.0 to 7.0	2	*	*
7.0 to 8.0	4	0.3	0.6
8.0 to 9.0	3	0.3	0.6
9.0 to 10.0	4	0.7	1.5
10.0 to 20.0	4	0.2	0.3
20.0 to 30.0	4	0.5	1.1
30.0 to 40.0	1	*	*
40.0 to 50.0	1	*	*
TOTAL:	81	28.1	55.9
Finfish, whole			
1.0 to 2.0	2	0.1	0.2
2.0 to 3.0	6	2.2	2.2
3.0 to 4.0	4	5.1	0.6
4.0 to 5.0	2	36.4	*
5.0 to 6.0	1	0.1	0.2
7.0 to 8.0	1	1.0	*
20.0 to 30.0	1	0.5	1.1
TOTALS:	17	45.4	4.3

Table 3.2. Summarized Distribution of Mean Arsenic Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of U. S. Catch[2]	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
2.0 to 3.0	6	2.2	4.0
3.0 to 4.0	5	1.6	3.2
4.0 to 5.0	3	*[3]	0.1
7.0 to 8.0	1	*	*
10.0 to 20.0	3	*	0.1
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
3.0 to 4.0	1	0.9	1.8
4.0 to 5.0	5	6.8	14.2
5.0 to 6.0	1	1.2	2.5
6.0 to 7.0	1	2.8	5.8
9.0 to 10.0	1	1.0	2.0
10.0 to 20.0	4	0.2	0.5
20.0 to 30.0	2	0.7	1.5
40.0 to 50.0	1	*	*
TOTAL:	16	13.7	28.4

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[1] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

[2] See page 12 for an explanation of these columns.

[3] * denotes less than .05%.

Table 3.3. Summarized Distribution of Mean Cadmium Levels in Resource Survey Species

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, muscle			
< 0.1	149	70.4	63.8
0.1 to 0.2	10	0.1	0.1
TOTAL:	159	70.5	63.9
Finfish, liver			
< 0.1	1	0.1	0.2
0.1 to 0.2	5	1.3	2.4
0.2 to 0.3	9	4.3	5.8
0.3 to 0.4	9	2.0	7.1
0.4 to 0.5	8	3.3	6.7
0.5 to 0.6	2	0.9	1.9
0.6 to 0.7	6	3.6	7.0
0.7 to 0.8	2	0.1	0.1
0.8 to 0.9	3	1.3	2.7
0.9 to 1.0	2	0.1	0.3
1.0 to 2.0	13	1.9	3.8
2.0 to 3.0	8	0.6	1.2
3.0 to 4.0	1	*[3]	*
4.0 to 5.0	4	1.2	2.4
6.0 to 7.0	1	1.7	3.5
7.0 to 8.0	2	0.1	0.2
8.0 to 9.0	3	4.9	10.2
10.0 to 20.0	2	1.0	0.8
20.0 to 30.0	1	*	*
TOTAL:	82	28.3	56.3
Finfish, whole			
< 0.1	2	.8	1.3
0.1 to 0.2	13	28.2	2.9
0.2 to 0.3	1	12.5	*
0.3 to 0.4	1	4.0	*
TOTAL:	17	45.4	4.3

Table 3.3. Summarized Distribution of Mean Cadmium Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
< 0.1	1	*[3]	*
0.1 to 0.2	7	1.5	3.0
0.2 to 0.3	3	0.6	1.2
0.3 to 0.4	1	*	*
0.7 to 0.8	1	0.5	0.6
0.9 to 1.0	1	0.9	2.0
1.0 to 2.0	2	0.3	0.6
2.0 to 3.0	2	0.1	0.1
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
< 0.1	3	4.7	9.8
0.1 to 0.2	9	8.2	17.0
0.2 to 0.3	3	0.7	1.5
0.3 to 0.4	1	*	0.1
TOTAL:	16	13.7	28.4

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[1] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

[2] See page 12 for an explanation of these columns.

[3] * denotes less than .05%.

Table 3.4. Summarized Distribution of Mean Chromium Levels in Resource Survey Species

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, muscle			
<0.1	4	0.1	0.3
0.1 to 0.2	90	27.1	51.0
0.2 to 0.3	56	43.3	12.5
0.3 to 0.4	7	*[3]	*
0.4 to 0.5	2	*	*
TOTAL:	159	70.6	63.9
Finfish, liver			
<0.1	7	1.7	2.9
0.1 to 0.2	44	13.4	26.4
0.2 to 0.3	16	12.1	25.0
0.3 to 0.4	11	0.9	1.9
0.4 to 0.5	3	0.1	0.1
1.0 to 2.0	1	0.1	0.1
TOTAL:	82	28.3	56.3
Finfish, whole			
<0.1	2	0.8	1.3
0.2 to 0.3	3	1.2	0.7
0.3 to 0.4	6	6.0	2.1
0.4 to 0.5	3	1.0	*
0.5 to 0.6	1	0.1	0.2
0.6 to 0.7	1	12.5	*
0.7 to 0.8	1	23.8	*
TOTAL:	17	45.4	4.3

Table 3.4. Summarized Distribution of Mean Chromium Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
0.1 to 0.2	3	0.5	0.6
0.2 to 0.3	5	0.4	0.7
0.3 to 0.4	8	3.0	6.1
0.4 to 0.5	1	*[3]	*
0.5 to 0.6	1	*	*
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
0.1 to 0.2	7	2.6	5.4
0.2 to 0.3	9	11.1	22.9
TOTAL:	16	13.6	28.3

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[1] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

[2] See page 12 for an explanation of these columns.

[3] * denotes less than .05%.

Table 3.5. Summarized Distribution of Mean Copper Levels in Resource Survey Species

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, muscle			
0.1 to 0.2	13	0.8	1.5
0.2 to 0.3	54	6.8	13.5
0.3 to 0.4	35	5.0	9.8
0.4 to 0.5	22	3.1	4.7
0.5 to 0.6	9	5.5	11.5
0.6 to 0.7	5	5.2	10.8
0.7 to 0.8	7	4.2	5.8
0.8 to 0.9	7	27.1	5.6
0.9 to 1.0	1	0.3	0.5
1.0 to 2.0	6	12.6	0.1
TOTAL:	159	70.5	63.9
Finfish, liver			
1.0 to 2.0	7	0.2	0.4
2.0 to 3.0	10	3.3	5.3
3.0 to 4.0	7	2.3	4.6
4.0 to 5.0	11	3.4	6.8
5.0 to 6.0	5	0.2	0.5
6.0 to 7.0	7	3.2	6.6
7.0 to 8.0	4	0.7	1.1
8.0 to 9.0	5	0.4	0.8
9.0 to 10.0	2	0.1	0.2
10.0 to 20.0	14	6.8	14.1
20.0 to 30.0	4	2.4	5.1
30.0 to 40.0	1	0.2	0.3
40.0 to 50.0	2	1.2	2.4
50.0 to 110.0	3	3.9	8.0
TOTAL:	82	28.3	56.3
Finfish, whole			
0.4 to 0.5	4	0.4	0.7
0.5 to 0.6	1	*[3]	*
0.6 to 0.7	2	0.6	1.1
0.7 to 0.8	3	24.8	*
0.8 to 0.9	2	1.4	0.8
0.9 to 1.0	1	*	0.1
1.0 to 2.0	4	18.3	1.7
TOTAL:	17	45.4	4.3

Table 3.5. Summarized Distribution of Mean Copper Levels in Resource Survey Species (continued)

Range, ppm[1/]	No. of Species	Percent of[2/] U. S. Catch	Percent of U. S. Catch[2/] Intended for Human Consumption
Mollusca, edible tissues			
0.1 to 0.2	2	0.1	0.3
0.3 to 0.4	1	* [3/]	0.1
0.6 to 0.7	3	1.4	2.9
0.7 to 0.8	2	*	*
1.0 to 2.0	1	*	*
2.0 to 3.0	2	0.3	0.7
3.0 to 4.0	1	*	*
4.0 to 5.0	1	0.3	0.5
5.0 to 6.0	1	*	*
8.0 to 9.0	1	*	*
10.0 to 20.0	1	0.2	0.3
20.0 to 30.0	1	0.5	0.6
30.0 to 40.0	1	0.9	1.9
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
1.0 to 2.0	1	0.9	1.8
2.0 to 3.0	3	3.3	6.7
3.0 to 4.0	3	3.0	6.3
4.0 to 5.0	1	*	*
5.0 to 6.0	1	0.5	1.1
6.0 to 7.0	3	4.2	8.7
7.0 to 8.0	1	*	0.1
9.0 to 10.0	2	1.1	2.2
10.0 to 20.0	1	0.7	1.4
TOTAL:	16	13.7	28.4

[1/] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

[2/] See page 12 for an explanation of these columns.

[3/] * denotes less than .05%.

Table 3.6. Summarized Distribution of Mean Lead Levels in Resource Survey Species

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, muscle			
0.1 to 0.2	1	*[3]	*
0.2 to 0.3	4	*	*
0.3 to 0.4	33	4.9	9.9
0.4 to 0.5	59	17.7	33.8
0.5 to 0.6	35	19.0	9.4
0.6 to 0.7	16	28.9	10.7
0.7 to 0.8	5	*	*
0.9 to 1.0	2	*	*
1.0 to 2.0	3	*	*
2.0 to 3.0	1	*	*
TOTAL:	159	70.5	63.9
Finfish, liver			
< 0.1	2	0.3	0.6
0.1 to 0.2	3	3.3	6.9
0.2 to 0.3	10	4.0	8.4
0.3 to 0.4	10	0.9	1.8
0.4 to 0.5	17	4.7	9.5
0.5 to 0.6	16	9.2	17,6
0.6 to 0.7	10	2.1	4.4
0.7 to 0.8	3	*	*
0.8 to 0.9	1	1.6	0.1
0.9 to 1.0	5	1.7	6.4
1.0 to 2.0	4	0.2	0.3
2.0 to 3.0	1	0.1	0.2
TOTAL:	82	28.3	56.3
Finfish, whole			
0.1 to 0.2	1	0.1	0.2
0.3 to 0.4	1	0.5	1.1
0.5 to 0.6	1	0.2	0.2
0.7 to 0.8	2	0.1	0.2
0.8 to 0.9	1	*	*
0.9 to 1.0	1	1.2	0.6
1.0 to 2.0	9	19.5	2.0
2.0 to 3.0	1	23.8	*
TOTAL:	17	45.4	4.3

Table 3.6. Summarized Distribution of Mean Lead Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
0.2 to 0.3	2	*[3]	*
0.4 to 0.5	2	0.2	0.4
0.5 to 0.6	5	1.7	3.4
0.6 to 0.7	7	1.7	3.0
0.7 to 0.8	1	0.3	0.7
0.8 to 0.9	1	0.1	0.1
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
0.4 to 0.5	1	*	*
0.5 to 0.6	4	1.7	3.5
0.6 to 0.7	9	8.9	18.5
0.7 to 0.8	1	3.0	6.2
0.8 to 0.9	1	*	0.1
TOTAL:	16	13.7	28.4

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[1] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

[2] See page 12 for an explanation of these columns.

[3] * denotes less than .05%.

Table 3.7. Summarized Distribution of Mean Manganese Levels in Resource Survey Species

Range, ppm[1/]	No. of Species	Percent of[2/] U. S. Catch	Percent of U. S. Catch[2/] Intended for Human Consumption
Finfish, muscle			
<0.1	17	0.4	0.9
0.1 to 0.2	102	28.0	55.9
0.2 to 0.3	24	2.0	3.7
0.3 to 0.4	7	3.1	3.0
0.4 to 0.5	2	0.5	0.1
0.5 to 0.6	2	0.1	0.3
0.6 to 0.7	1	23.8	*[3/]
0.7 to 0.8	2	12.6	*
1.0 to 2.0	2	*	*
TOTAL:	159	70.5	63.9
Finfish, liver			
0.2 to 0.3	1	*	*
0.3 to 0.4	2	*	*
0.4 to 0.5	1	*	*
0.5 to 0.6	6	4.0	8.2
0.6 to 0.7	15	6.4	13.2
0.7 to 0.8	13	3.9	8.1
0.8 to 0.9	11	3.1	6.3
0.9 to 1.0	6	0.5	1.0
1.0 to 2.0	27	10.3	19.5
TOTAL:	82	28.3	56.3
Finfish, whole			
0.2 to 0.3	1	0.1	0.2
0.4 to 0.5	1	0.5	1.1
0.5 to 0.6	2	0.2	0.2
0.6 to 0.7	1	*	*
0.7 to 0.8	1	*	*
1.0 to 2.0	8	4.2	2.7
2.0 to 3.0	1	3.9	*
5.0 to 6.0	1	12.6	*
9.0 to 10.0	1	23.8	*
TOTAL:	17	45.4	4.3

Table 3.7. Summarized Distribution of Mean Manganese Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
0.1 to 0.2	1	*[3]	*
0.2 to 0.3	4	0.2	0.4
0.3 to 0.4	1	*	0.1
0.4 to 0.5	1	0.5	0.6
0.5 to 0.6	1	*	*
0.6 to 0.7	1	*	0.1
0.8 to 0.9	1	*	*
1.0 to 2.0	2	1.4	2.8
2.0 to 3.0	2	0.1	0.1
4.0 to 5.0	1	0.9	1.9
6.0 to 7.0	2	0.6	1.2
7.0 to 8.0	1	0.1	0.3
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
0.1 to 0.2	1	0.2	0.4
0.2 to 0.3	2	0.9	1.8
0.3 to 0.4	6	3.1	6.5
0.4 to 0.5	1	*	*
0.5 to 0.6	1	0.7	1.5
0.6 to 0.7	2	4.5	9.4
0.7 to 0.8	1	1.2	2.5
1.0 to 2.0	2	3.1	6.3
TOTAL:	16	13.7	28.4

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[1] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

[2] See page 12 for an explanation of these columns.

[3] * denotes less than .05%.

Table 3.8. Summarized Distribution of Mean Mercury Levels in Resource Survey Species

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, muscle			
< 0.1	45	53.6	30.7
0.1 to 0.2	49	12.8	26.1
0.2 to 0.3	18	1.9	3.9
0.3 to 0.4	15	1.7	2.2
0.4 to 0.5	1	* [3]	*
0.5 to 0.6	8	0.4	0.7
0.6 to 0.7	3	*	*
0.7 to 0.8	4	0.1	0.1
0.8 to 0.9	3	*	*
1.0 to 2.0	8	*	*
2.0 to 3.0	4	*	*
4.0 to 5.0	1	*	*
TOTAL:	159	70.5	63.9
Finfish, liver			
< 0.1	31	13.5	27.1
0.1 to 0.2	17	4.7	9.8
0.2 to 0.3	6	7.0	14.4
0.3 to 0.4	5	1.0	2.1
0.4 to 0.5	1	0.1	0.2
0.5 to 0.6	2	0.3	0.5
0.6 to 0.7	1	0.1	0.3
0.7 to 0.8	2	*	*
0.8 to 0.9	2	1.0	0.8
0.9 to 1.0	4	0.2	0.5
1.0 to 2.0	4	*	*
2.0 to 3.0	3	0.2	0.4
3.0 to 4.0	1	*	*
5.0 to 6.0	1	*	*
7.0 to 8.0	1	*	*
10.0 to 20.0	1	*	*
TOTAL:	82	28.3	56.3
Finfish, whole			
< 0.1	13	31.2	3.7
0.1 to 0.2	3	13.8	0.6
0.2 to 0.3	1	0.4	*
TOTAL:	17	45.4	4.3

Table 3.8. Summarized Distribution of Mean Mercury Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of U. S. Catch[2]	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
< 0.1	18	3.8	7.5
Crustacea, edible tissues			
< 0.1	6	6.6	13.7
0.1 to 0.2	9	6.4	13.2
0.2 to 0.3	1	0.7	1.4
TOTAL:	16	13.7	28.4

1/ Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

2/ See page 12 for an explanation of these columns.

3/ * denotes less than .05%.

Table 3.9. Summarized Distribution of Mean Molybdenum Levels in Resource Survey Species

Range, ppm[1/]	No. of Species	Percent of[2/] U. S. Catch	Percent of U. S. Catch[2/] Intended for Human Consumption
Finfish, muscle			
< 0.1	21	0.4	0.8
0.1 to 0.2	48	5.9	9.6
0.2 to 0.3	61	57.2	40.9
0.3 to 0.4	18	5.6	10.7
0.4 to 0.5	7	0.3	0.7
0.5 to 0.6	4	0.5	1.0
TOTAL:	159	70.5	63.8
Finfish, liver			
< 0.1	4	0.3	0.7
0.1 to 0.2	12	1.1	2.2
0.2 to 0.3	27	9.0	18.0
0.3 to 0.4	16	8.3	15.6
0.4 to 0.5	14	8.6	17.8
0.5 to 0.6	6	0.1	0.3
0.6 to 0.7	1	0.2	0.3
0.9 to 1.0	1	0.1	0.1
1.0 to 2.0	1	0.6	1.3
TOTAL:	82	28.3	56.3
Finfish, whole			
< 0.1	2	0.8	1.3
0.1 to 0.2	2	* [3/]	*
0.2 to 0.3	5	2.1	2.2
0.3 to 0.4	6	14.9	0.8
0.4 to 0.5	1	23.8	*
0.5 to 0.6	1	3.9	*
TOTAL:	17	45.4	4.3

Table 3. 9. Summarized Distribution of Mean Molybdenum Levels in Resource Survey Species (continued)

Range, ppm [1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
< 0.1	1	* [3]	*
0.1 to 0.2	2	*	*
0.2 to 0.3	7	1.0	1.6
0.3 to 0.4	2	1.6	3.5
0.4 to 0.5	2	0.9	1.9
0.5 to 0.6	1	*	*
0.7 to 0.8	2	0.1	0.1
3.0 to 4.0	1	0.1	0.3
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
0.1 to 0.2	11	4.7	9.8
0.2 to 0.3	3	8.7	18.1
0.3 to 0.4	2	0.2	0.4
TOTAL:	16	13.7	28.4

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[1] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

[2] See page 12for an explanation of these columns.

[3] * denotes less than .05%.

Table 3.10. Summarized Distribution of Mean Nickel Levels in Resource Survey Species

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, muscle			
< 0.1	2	*[3]	*
0.1 to 0.2	36	4.5	7.8
0.2 to 0.3	111	53.1	55.4
0.3 to 0.4	5	12.9	0.7
0.4 to 0.5	1	*	*
0.6 to 0.7	1	*	*
0.7 to 0.8	1	*	*
0.9 to 1.0	1	*	*
2.0 to 3.0	1	*	*
TOTAL:	159	70.5	63.9
Finfish, liver			
0.1 to 0.2	22	11.7	22.4
0.2 to 0.3	32	9.3	24.7
0.3 to 0.4	9	0.3	0.7
0.4 to 0.5	5	0.7	1.5
0.5 to 0.6	8	6.1	6.5
0.6 to 0.7	1	*	0.5
0.8 to 0.9	2	*	*
1.0 to 2.0	1	*	*
2.0 to 3.0	2	*	*
TOTAL:	82	28.3	56.3
Finfish, whole			
0.2 to 0.3	2	0.8	1.1
0.3 to 0.4	6	3.2	2.9
0.4 to 0.5	2	0.1	0.1
0.5 to 0.6	3	1.0	0.2
0.6 to 0.7	1	*	*
0.7 to 0.8	1	3.9	*
0.8 to 0.9	1	12.6	*
0.9 to 1.0	1	23.8	*
TOTAL:	17	45.4	4.3

Table 3.10. Summarized Distribution of Mean Nickel Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
0.2 to 0.3	5	0.7	1.0
0.3 to 0.4	3	0.2	0.4
0.4 to 0.5	1	*[3]	*
0.5 to 0.6	4	2.6	5.4
0.7 to 0.8	2	*	*
1.0 to 2.0	2	0.3	0.7
2.0 to 3.0	1	*	*
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
0.2 to 0.3	4	3.1	6.4
0.3 to 0.4	8	6.3	13.1
0.4 to 0.5	1	3.0	6.2
0.5 to 0.6	2	1.2	2.5
0.8 to 0.9	1	*	0.1
TOTAL:	16	13.7	28.4

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[1] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

[2] See page 12 for an explanation of these columns.

[3] * denotes less than .05%.

Table 3.11. Summarized Distribution of Mean Selenium Levels in Resource Survey Species

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, muscle			
0.1 to 0.2	2	0.2	0.5
0.2 to 0.3	2	*[3]	*
0.3 to 0.4	8	1.1	2.3
0.4 to 0.5	23	11.2	21.2
0.5 to 0.6	29	5.4	8.3
0.6 to 0.7	27	26.4	4.9
0.7 to 0.8	19	13.6	2.1
0.8 to 0.9	17	3.3	5.4
0.9 to 1.0	10	0.7	1.5
1.0 to 2.0	22	8.5	17.7
TOTAL:	159	70.5	63.9
Finfish, liver			
0.6 to 0.7	2	0.1	0.1
0.7 to 0.8	1	0.1	0.2
0.8 to 0.9	3	1.2	2.4
0.9 to 1.0	3	2.1	4.2
1.0 to 2.0	32	7.3	14.7
2.0 to 3.0	17	4.3	7.7
3.0 to 4.0	7	1.2	2.5
4.0 to 5.0	1	*	*
5.0 to 6.0	2	0.1	0.3
6.0 to 7.0	1	3.2	6.7
7.0 to 8.0	1	*	*
8.0 to 9.0	2	1.0	0.8
9.0 to 10.0	2	1.7	3.6
10.0 to 20.0	4	6.0	12.4
20.0 to 30.0	1	0.1	0.2
TOTAL:	79	28.1	55.9
Finfish, whole			
0.3 to 0.4	1	0.1	0.2
0.4 to 0.5	1	*	0.1
0.5 to 0.6	3	3.9	0.1
0.6 to 0.7	1	0.2	0.2
0.7 to 0.8	3	1.4	0.9
0.8 to 0.9	4	25.7	1.8
1.0 to 2.0	4	14.1	1.1
TOTAL:	17		4.3

Table 3.11. Summarized Distribution of Mean Selenium Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
0.1 to 0.2	1	* [3]	*
0.2 to 0.3	1	*	*
0.3 to 0.4	4	1.6	3.2
0.4 to 0.5	5	0.4	0.8
0.5 to 0.6	4	0.5	0.7
0.7 to 0.8	2	1.1	2.3
0.8 to 0.9	1	0.3	0.5
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
0.2 to 0.3	1	0.2	0.4
0.3 to 0.4	4	2.5	5.1
0.4 to 0.5	1	1.0	2.1
0.5 to 0.6	1	0.5	1.1
0.6 to 0.7	4	5.7	11.9
0.7 to 0.8	2	3.0	6.2
0.8 to 0.9	1	0.7	1.4
1.0 to 2.0	2	*	0.1
TOTAL:	16	13.7	28.4

1/ Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).
2/ See page 12 for an explanation of these columns.
3/ * denotes less than .05%.

Table 3.12. Summarized Distribution of Mean Silver Levels in Resource Survey Species

Range, ppm[1/]	No. of Species	Percent of[2/] U. S. Catch	Percent of U. S. Catch Intended for Human Consumption
Finfish, muscle			
0.1	158	70.5	63.9
0.1 to 0.2	1	* [3/]	*
TOTAL:	159	70.5	63.9
Finfish, liver			
0.1	66	20.5	40.1
0.1 to 0.2	9	1.3	2.9
0.2 to 0.3	3	4.6	9.5
0.3 to 0.4	3	1.2	2.4
0.5 to 0.6	1	0.6	1.3
TOTAL:	82	28.3	56.3
Finfish, whole			
0.1	10	4.0	4.0
0.1 to 0.2	7	41.4	0.4
TOTAL:	17	45.4	4.3
Mollusca, edible tissues			
0.1	10	2.4	4.5
0.1 to 0.2	3	*	*
0.2 to 0.3	2	0.7	1.0
0.3 to 0.4	2	0.9	1.9
0.6 to 0.7	1	*	*
TOTAL:	18	3.8	7.5

Table 3.12. Summarized Distribution of Mean Silver Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Crustacea, edible tissues			
< 0.1	8	6.9	14.2
0.1 to 0.2	5	3.1	6.3
0.3 to 0.4	2	3.0	6.3
0.4 to 0.5	1	0.7	1.4
TOTAL:	16	13.7	28.2

1/ Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

2/ See page 12 for an explanation of these columns.

3/ * denotes less than .05%.

Table 3.13. Summarized Distribution of Mean Tin Levels in Resource Survey Species

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, muscle			
0.2 to 0.3	2	0.1	0.2
0.3 to 0.4	6	0.3	0.6
0.4 to 0.5	35	4.5	8.0
0.5 to 0.6	75	25.3	24.9
0.6 to 0.7	23	12.0	21.7
0.7 to 0.8	11	28.2	8.2
0.8 to 0.9	4	*[3]	*
1.0 to 2.0	3	0.1	0.3
TOTAL:	159	70.5	63.9
Finfish, liver			
< 0.1	1	*	*
0.2 to 0.3	8	1.8	2.4
0.3 to 0.4	18	3.5	6.6
0.4 to 0.5	11	5.1	10.3
0.5 to 0.6	14	7.8	16.0
0.6 to 0.7	12	5.3	10.8
0.7 to 0.8	8	3.7	7.6
0.8 to 0.9	3	0.6	1.3
0.9 to 1.0	4	0.2	0.4
1.0 to 2.0	3	0.3	0.7
TOTAL:	82	28.3	56.3
Finfish, whole			
0.3 to 0.4	1	0.5	1.1
0.5 to 0.6	1	0.2	0.2
0.8 to 0.9	1	0.1	0.1
1.0 to 2.0	11	44.1	2.9
2.0 to 3.0	1	0.4	*
4.0 to 5.0	1	*	*
8.0 to 9.0	1	*	*
TOTAL:	17	45.4	4.3

Table 3.13. Summarized Distribution of Mean Tin Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Mollusca, edible tissues			
0.3 to 0.4	1	*[3]	*
0.4 to 0.5	2	1.5	3.1
0.5 to 0.6	3	1.2	2.5
0.6 to 0.7	4	0.9	1.4
0.7 to 0.8	2	0.2	0.4
0.8 to 0.9	2	*	*
0.9 to 1.0	1	*	*
1.0 to 2.0	3	*	*
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
0.6 to 0.7	5	5.4	11.3
0.7 to 0.8	4	1.5	3.0
0.8 to 0.9	4	4.2	10.8
0.9 to 1.0	2	2.6	3.3
1.0 to 2.0	1	*	*
TOTAL:	16	13.7	28.4

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[1] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

[2] See page 12 for an explanation of these columns.

[3] * denotes less than .05%.

Table 3.14. Summarized Distribution of Mean Vanadium Levels in Resource Survey Species

Range, ppm[1/]	No. of Species	Percent of[2/] U. S. Catch	Percent of U. S. Catch[2/] Intended for Human Consumption
Finfish, muscle			
< 0.1	17	0.6	0.3
0.1 to 0.2	12	0.2	0.3
0.2 to 0.3	56	25.4	22.5
0.3 to 0.4	44	16.2	32.2
0.4 to 0.5	20	27.3	6.8
0.5 to 0.6	4	0.8	1.5
0.6 to 0.7	3	*[3/]	*
0.7 to 0.8	1	0.1	0.3
0.8 to 0.9	1	*	*
1.0 to 2.0	1	*	*
TOTAL:	159	70.5	63.9
Finfish, liver			
< 0.1	18	2.0	3.5
0.1 to 0.2	4	2.8	5.8
0.2 to 0.3	18	6.2	12.5
0.3 to 0.4	8	6.9	14.4
0.4 to 0.5	8	5.2	10.8
0.5 to 0.6	1	0.1	0.3
0.6 to 0.7	4	0.1	0.2
0.7 to 0.8	3	0.7	1.4
0.8 to 0.9	3	1.3	2.7
0.9 to 1.0	2	0.1	0.3
1.0 to 2.0	10	1.7	3.3
2.0 to 3.0	1	*	*
3.0 to 4.0	1	1.0	0.7
5.0 to 6.0	1	0.1	0.2
TOTAL:	82	28.3	56.3

Table 3.14. Summarized Distribution of Mean Vanadium Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, whole			
< 0.1	1	0.5	1.1
0.1 to 0.2	1	0.2	0.2
0.2 to 0.3	1	* [3]	*
0.3 to 0.4	1	*	0.1
0.4 to 0.5	5	3.2	2.6
0.6 to 0.7	2	0.1	0.1
0.7 to 0.8	3	4.1	0.3
1.0 to 2.0	2	13.6	*
2.0 to 3.0	1	23.8	*
TOTAL:	17	45.4	4.3
Mollusca, edible tissues			
< 0.1	1	*	*
0.1 to 0.2	1	*	*
0.2 to 0.3	5	0.6	0.8
0.3 to 0.4	1	0.2	0.3
0.4 to 0.5	5	2.0	4.0
0.5 to 0.6	2	*	0.1
0.6 to 0.7	1	*	*
0.7 to 0.8	1	0.9	1.9
1.0 to 2.0	1	0.2	0.3
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
0.1 to 0.2	1	0.9	1.8
0.2 to 0.3	2	*	*
0.3 to 0.4	5	3.5	7.4
0.4 to 0.5	8	9.2	19.2
TOTAL:	16	13.7	28.3

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[1] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

[2] See page 12 for an explanation of these columns.

[3] * denotes less than .05%.

Table 3.15. Summarized Distribution of Mean Zinc Levels in Resource Survey Species

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, muscle			
2.0 to 3.0	7	0.3	0.7
3.0 to 4.0	34	6.3	12.4
4.0 to 5.0	48	7.8	14.8
5.0 to 6.0	29	14.2	27.9
6.0 to 7.0	19	38.3	2.0
7.0 to 8.0	8	1.7	2.4
8.0 to 9.0	6	1.7	3.6
9.0 to 10.0	2	*[3]	*
10.0 to 20.0	6	0.1	0.1
TOTAL:	159	70.5	63.9
Finfish, liver			
4.0 to 5.0	1	*	*
5.0 to 6.0	1	*	*
8.0 to 9.0	1	*	*
9.0 to 10.0	1	*	*
10.0 to 20.0	16	2.4	5.0
20.0 to 30.0	19	8.2	16.5
30.0 to 40.0	14	8.6	16.3
40.0 to 50.0	7	1.9	4.0
50.0 to 60.0	6	0.9	1.7
60.0 to 70.0	3	1.1	1.9
70.0 to 80.0	2	4.9	10.1
80.0 to 90.0	1	*	*
90.0 to 100.0	2	0.1	0.2
100.0 to 200.0	3	*	*
200.0 to 300.0	3	0.2	0.3
300.0 to 400.0	1	*	*
600.0 to 700.0	1	*	*
TOTAL:	82	28.3	56.3

Table 3.15. Summarized Distribution of Mean Zinc Levels in Resource Survey Species (continued)

Range, ppm[1]	No. of Species	Percent of[2] U. S. Catch	Percent of U. S. Catch[2] Intended for Human Consumption
Finfish, whole			
2.0 to 3.0	1	0.5	1.1
6.0 to 7.0	1	0.2	0.2
10.0 to 20.0	10	16.9	3.0
20.0 to 30.0	5	27.8	0.1
TOTAL:	17	45.4	4.3
Mollusca, edible tissues			
5.0 to 6.0	1	*[3]	*
7.0 to 8.0	1	*	*
8.0 to 9.0	1	*	*
10.0 to 20.0	13	2.7	5.2
100.0 to 200.0	1	0.2	0.3
300.0 to 400.0	1	0.9	1.9
TOTAL:	18	3.8	7.5
Crustacea, edible tissues			
10.0 to 20.0	8	7.5	15.5
20.0 to 30.0	3	0.9	1.9
30.0 to 40.0	2	3.0	6.2
40.0 to 50.0	2	1.2	2.5
50.0 to 60.0	1	1.1	2.2
TOTAL:	16	13.7	28.4

1/ Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g. 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

2/ See page 12 for an explanation of these columns.

3/ * denotes less than .05%.

Table 4.1. Distribution of Mean Antimony Levels in the Resource Survey, by Species

Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	Ranges of Mean Antimony Content, ppm[2/]																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
078-005	Alewife	muscle	43	40								M																
		whole	4	4											W													
001-016	Anchovy, northern	whole	40	37												W												
001-006	Anchovy, striped	h & g	40	18											H													
002-002	Argentine, Atlantic	h & g	7	4											H													
062-014	Ballyhoo	whole	57	43												W												
005-002	Barracuda, Atlantic	muscle	7	1	M																							
005-001	Barracuda, Pacific	muscle	20	18										M														
006-006	Bass, black sea	muscle	55	39							M																	
		liver	2	2											L													
007-004	Bass, striped	muscle	117	92						M																		
		liver	3	3									L															
012-001	Bluefish	muscle	73	54							M																	
		liver	4	4									L															
091-011	Bonito, Atlantic	muscle	15	2					M																			
091-009	Bonito, Pacific	muscle	40	35									M															
		liver	1	1											L													
021-007	Bullhead, brown	muscle	4	4							M																	
018-014	Butterfish	muscle	72	61								M																
		whole	17	1				W																				
		h & g	1	1											H													
021-010	Catfish, channel	muscle	20	16						M																		
023-002	Catfish, gafftopsail	muscle	34	30										M														
		liver	3	3								L																
023-001	Catfish, sea	muscle	47	34								M																
		liver	6	5									L															
021-002	Catfish, white	muscle	1	1						M																		
033-008	Cod, Atlantic	muscle	114	99							M																	
		liver	35	28					L																			
033-007	Cod, Pacific (gray)	muscle	59	49							M																	
		liver	15	11				L																				
045-026	Croaker, Atlantic	muscle	91	64								M																
033-004	Cusk	muscle	76	58						M																		
		liver	18	16				L																				
037-004	Cusk-eel, fawn	muscle	2	2											M													
145-018	Dogfish, smooth	muscle	95	62							M																	
141-007	Dogfish, spiny	muscle	115	99							M																	
		liver	29	22					L																			
041-002	Dolphin	muscle	63	53								M																
		liver	28	28								L																
045-019	Drum, banded	muscle	5	2											M													
045-028	Drum, black	muscle	61	51								M																
		liver	2	2											L													
045-030	Drum, red	muscle	73	55								M																
		liver	3	3							L																	
051-001	Eel, American	muscle	30	21						M																		
047-002	Eel, conger	muscle	1	0	M																							
153-009	Eulachon	whole	33	26											W													
058-028	Flounder, fourspot	muscle	71	47						M																		
058-024	Flounder, Gulf	muscle	41	38								M																
		liver	1	1											L													
058-027	Flounder, southern	muscle	42	25								M																
		liver	2	2									L															
058-026	Flounder, summer (fluke)	muscle	42	29									M															
		liver	2	2								L																
058-030	Flounder, windowpane (s.dab)	muscle	18	15							M																	
059-030	Flounder, winter	muscle	123	104							M																	
		liver	2	2							L																	
059-005	Flounder, witch	muscle	71	69						M																		
059-016	Flounder, yellowtail	muscle	89	85							M																	
		liver	2	1											L													
006-040	Gag	muscle	30	27						M																		
066-009	Goatfish	muscle	40	31							M																	
068-001	Goosefish	muscle	80	66						M																		
		liver	10	9				L																				
		h & g	1	0	H																							
006-037	Grouper, black	muscle	34	31										M														
006-017	Grouper, red	muscle	41	36						M																		
006-038	Grouper, yellowmouth	muscle	10	8								M																
		liver	1	1											L													
073-015	Grunt, bluestriped (yellow)	muscle	16	6							M																	

Table 4.1. Distribution of Mean Antimony Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Antimony Content, ppm[2]																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
073-014	Grunt, white	muscle	17	12									M															
033-011	Haddock	muscle	77	74							M																	
		liver	18	14						L																		
		whole	1	0	W																							
033-013	Hake, Pacific	muscle	49	36							M																	
		liver	1	1		L																						
033-020	Hake, red	muscle	65	64							M																	
033-012	Hake, silver (whiting)	muscle	83	81							M																	
		liver	3	3					L																			
033-024	Hake, spotted	muscle	65	22							M																	
033-025	Hake, white	muscle	70	70						M																		
		liver	31	25			L																					
059-011	Halibut, Pacific	muscle	37	32									M															
		liver	16	15							L																	
143-001	Hammerhead, scalloped	muscle	12	12								M																
143-005	Hammerhead, smooth	muscle	10	8							M																	
		liver	7	5								L																
018-011	Harvestfish	muscle	3	2									M															
		whole	16	2		W																						
078-011	Herring, Atlantic	muscle	24	10								M																
		whole	63	63											W													
		headed	6	6											E													
		h & g	2	2											H													
078-001	Herring, blueback	whole	1	1											W													
078-012	Herring, Pacific	muscle	14	12											M													
		whole	30	30											W													
078-015	Herring, round	h & g	50	17											H													
006-013	Hind, speckled	muscle	20	20							M																	
		liver	7	7						L																		
079-068	Jack, (mackerel scad)	muscle	40	30							M																	
079-053	Jack, akule	muscle	39	34							M																	
079-005	Jack, crevalle	muscle	49	43								M																
		liver	4	3										L														
079-069	Jack, crevalle (Hawaii)	muscle	39	31																								
149-004	Jacksmelt	whole	20	20											W													
006-016	Jewfish	muscle	8	6							M		M															
045-024	Kingfish, northern	muscle	6	6							M																	
045-021	Kingfish, southern	muscle	14	14								M																
		liver	1	1						L																		
200-002	Ladyfish	muscle	2	2				M																				
071-005	Lingcod	muscle	78	60									M															
		liver	13	13								L																
091-013	Mackerel, Atlantic	muscle	80	52								M																
091-012	Mackerel, chub	muscle	30	29								M																
079-034	Mackerel, jack	muscle	10	10						M																		
		liver	1	1								L																
		headed	4	4											E													
091-014	Mackerel, king	muscle	107	94								M																
		liver	10	9						L																		
		milt	1	0	Q																							
		roe	11	1	R																							
091-016	Mackerel, Spanish	muscle	109	91										M														
		liver	4	4						L																		
144-003	**Mako,** shortfin	muscle	3	3							M																	
		liver	2	2						L																		
011-002	Marlin, blue	muscle	33	28							M																	
		liver	11	7										L														
011-005	Marlin, striped	muscle	40	35							M																	
		liver	9	6											L													
011-003	Marlin, white	muscle	54	48							M																	
		liver	10	8											L													
162-012	Mempachi	muscle	20	12									M															
		liver	1	0	L																							
078-010	Menhaden, Atlantic	muscle	10	1				M																				
		whole	101	92												W												
078-008	Menhaden, Gulf	muscle	50	44									M															
		whole	28	25												W												
		gutted	9	7												G												
078-009	Menhaden, yellowfin	whole	13	12												W												
206-001	Milkfish	muscle	39	35							M																	

Table 4.1. Distribution of Mean Antimony Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Antimony Content, ppm[2]																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
094-010	Mojarra, yellowfin	muscle	10	9								M																
098-003	Mullet, silver (white)	muscle	36	36							M																	
098-002	Mullet, striped	muscle	156	129							M																	
		liver	5	4								L																
079-030	Palometa	muscle	2	0	M																							
131-023	Perch, ocean (Pacific)	muscle	30	22							M																	
		liver	18	14						L																		
131-052	Perch, ocean (redfish)	muscle	80	79							M																	
		liver	2	2										L														
006-010	Perch, sand	muscle	1	1		M																						
168-005	Perch, shiner	whole	2	2											W													
045-003	Perch, silver	muscle	20	17									M															
007-001	Perch, white	muscle	27	26									M															
		h & g	19	19												H												
079-029	Permit	muscle	9	7											M													
073-017	Pigfish	muscle	34	26								M																
114-013	Pinfish, spottail	muscle	10	7							M																	
		liver	1	1										L														
059-008	Plaice, American (dab)	muscle	68	66						M																		
		whole	1	1											W													
033-017	Pollock	muscle	73	67							M																	
		liver	33	23				L																				
033-019	Pollock, walleye (Alaska)	muscle	48	46							M																	
		liver	3	3						L																		
079-028	Pompano, Florida	muscle	60	56							M																	
		liver	4	3							L																	
114-014	Porgy, red	muscle	22	21										M														
		liver	1	0	L																							
056-018	Pout, ocean	muscle	34	24							M																	
		liver	3	2						L																		
131-061	Rockfish, bocaccio	muscle	48	35										M														
		liver	4	4					L																			
131-063	Rockfish, canary	muscle	44	28											M													
		liver	1	1											L													
131-031	Rockfish, copper	muscle	10	10								M																
131-043	Rockfish, yellowtail	muscle	20	15							M																	
079-004	Runner, blue	muscle	56	52									M															
		liver	4	3						L																		
126-001	Sablefish	muscle	103	87							M																	
		liver	14	10						L																		
011-001	Sailfish	muscle	42	37						M																		
		liver	3	3											L													
179-020	Salmon, chinook, (king)	muscle	109	95							M																	
		liver	22	21						L																		
179-017	Salmon, chum (keta)	muscle	57	42								M																
		liver	5	4					L																			
179-018	Salmon, coho (silver)	muscle	68	56								M																
		liver	7	7							L																	
179-016	Salmon, pink	muscle	27	22									M															
		liver	3	3						L																		
179-019	Salmon, sockeye (red)	muscle	62	47									M															
		liver	4	4						L																		
079-013	Scad, round	h & g	3	3												H												
006-041	Scamp	muscle	10	10						M																		
		liver	1	1											L													
132-031	Sculpin, longhorn	muscle	1	0	M																							
114-016	Scup	muscle	72	45											M													
135-010	Searobin, northern	muscle	78	33									M															
135-011	Searobin, striped	muscle	10	9							M																	
045-012	Seatrout, gray (weakfish)	muscle	72	55							M																	
		liver	3	3						L																		
		whole	10	10											W													
045-007	Seatrout, sand	muscle	18	16								M																
045-010	Seatrout, silver (white)	muscle	44	40							M																	
		liver	1	1										L														
045-008	Seatrout, spotted (speckled)	muscle	89	66							M																	
		liver	3	3								L																
078-006	Shad, American	muscle	60	27									M															
145-025	Shark, Atlantic, sharpnose	muscle	1	1											M													
145-006	Shark, blacktip	muscle	16	16							M																	
		liver	4	3						L																		

Table 4.1. Distribution of Mean Antimony Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Antimony Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	14						M																		
		liver	9	7					L																			
145-010	Shark, dusky	muscle	4	3					M																			
145-009	Shark, sandbar	muscle	13	12							M																	
		liver	7	5				L																				
144-001	Shark, white	muscle	2	1											M													
114-001	Sheepshead	muscle	60	39									M															
		liver	2	2									L															
150-005	Skate, little	muscle	54	18										M														
		liver	2	2					L																			
150-012	Skate, winter	muscle	2	2											M													
		liver	1	1											L													
155-005	Snapper, blackfin	muscle	13	12									M															
155-025	Snapper, gray	muscle	40	38								M																
155-008	Snapper, gray (mangrove)	muscle	28	23									M															
155-006	Snapper, red	muscle	38	29									M															
155-024	Snapper, red (ehu)	muscle	40	34							M																	
155-015	Snapper, vermilion	muscle	36	28								M																
		liver	2	1							L																	
155-013	Snapper, yellowtail	muscle	43	37								M																
157-004	Snook	muscle	12	11							M																	
059-021	Sole, Dover	muscle	70	53									M															
		liver	4	2						L																		
059-022	Sole, English	muscle	73	58									M															
		liver	5	4							L																	
059-004	Sole, petrale	muscle	56	49								M																
		liver	7	4								L																
059-006	Sole, rex	muscle	61	51								M																
059-014	Sole, rock	muscle	10	9										M														
011-004	Spearfish, shortbill	muscle	15	15							M																	
		liver	4	2						L																		
045-020	Spot	muscle	54	36									M															
166-003	Sturgeon, green	muscle	10	5									M															
168-001	Surfperch, barred	muscle	20	20										M														
200-003	Tarpon	muscle	11	9								M																
		liver	2	1							L																	
185-022	Tautog	muscle	14	14							M																	
174-003	Tilefish	muscle	60	60							M																	
179-028	Trout, cutthroat	muscle	3	3						M																		
179-029	Trout, rainbow (steelhead)	muscle	9	9							M																	
		liver	1	1								L																
091-019	Tuna, albacore	muscle	40	33								M																
		liver	5	5									L															
091-022	Tuna, bigeye	muscle	40	40						M																		
		liver	21	20							L																	
091-021	Tuna, blackfin	muscle	1	0	M																							
091-023	Tuna, bluefin	muscle	11	9										M														
		liver	1	0	L																							
091-008	Tuna, skipjack	muscle	70	60								M																
		liver	8	8								L																
091-020	Tuna, yellowfin	muscle	80	74									M															
		liver	26	23								L																
091-006	Tunny, little	muscle	50	41							M																	
		liver	2	1						L																		
091-001	Wahoo	muscle	18	10									M															
		liver	3	2										L														
183-002	Wolffish, Atlantic	muscle	60	49						M																		
		liver	15	15					L																			
079-023	Yellowtail	muscle	24	22									M															
	Mollusca																											
187-005	Abalone, green	shucked	10	9										S														
187-008	Abalone, red	shucked	10	8											S													
191-003	Clam, butter	shucked	29	25											S													
191-001	Clam, hard (quahog)	shucked	141	116										S														
191-008	Clam, Pacific littleneck	shucked	1	1										S														
243-002	Clam, razor	shucked	39	32											S													
242-001	Clam, soft	shucked	19	0	S																							
244-005	Clam, surf	shucked	23	0	S																							
205-001	Octopus (marmuratus)	whole	4	3											W													
		mantle	36	32									N															

Table 4.1. Distribution of Mean Antimony Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Antimony Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	152	136									S															
189-002	Oyster, Pacific (giant)	shucked	70	55										S														
190-014	Scallop, Atlantic bay	adductor muscle	20	17						A																		
190-016	Scallop, calico	shucked	10	9											S													
		adductor muscle	20	17							A																	
190-028	Scallop, pink	adductor muscle	5	0	A																							
190-013	Scallop, sea (smooth)	adductor muscle	11	11						A																		
188-003	Squid, Atlantic longfinned	whole	23	23									W															
		mantle	110	37								N																
188-006	Squid, Pacific	whole	50	48							W																	
188-014	Squid, shortfinned	mantle	91	49										N														
	Crustacea																											
196-001	Crab, blue	body meat	35	32											B													
		claw meat	5	4											C													
		claw & body meat	54	27											D													
196-011	Crab, dungeness	meat, unk.	42	38										U														
		claw & body meat	8	5										D														
196-012	Crab, king	meat, unk.	20	20											U													
		claw & body meat	9	9									D															
196-006	Crab, red, deep sea	meat, unk.	25	3			U																					
196-003	Crab, rock	meat, unk.	15	3			U																					
196-035	Crab, tanner (bairdi)	meat, unk.	49	49								U																
194-012	Lobster, northern (American)	body meat	2	2									B															
		claw meat	2	2									C															
		tail meat	2	2								T																
		leg meat	2	1									F															
		claw & tail meat	80	75										K														
194-002	Lobster, spiny (Atlantic)	tail meat	39	37											T													
194-003	Lobster, spiny (Pacific)	tail meat	5	5										T														
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	17									P															
192-005	Shrimp, brown	tail, peeled	53	39									P															
192-007	Shrimp, ocean	tail, peeled	10	10									P															
192-010	Shrimp, pink	tail, peeled	50	35											P													
192-011	Shrimp, pink (northern)	tail, peeled	64	33										P														
192-003	Shrimp, royal red	tail, peeled	12	12										P														
192-004	Shrimp, white	tail, peeled	77	61										P														

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[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.2. Distribution of Mean Arsenic Levels in the Resource Survey, by Species

					Ranges of Mean Arsenic Content, ppm2/																							
Species Number	Species	Tissue1/	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
078-005	Alewife	muscle	43	43													M											
		whole	4	4													W											
001-016	Anchovy, northern	whole	38	38													W											
001-006	Anchovy, striped	h & g	40	40											H													
002-002	Argentine, Atlantic	h & g	6	6												H												
062-014	Ballyhoo	whole	57	57													W											
005-002	Barracuda, Atlantic	muscle	7	7													M											
005-001	Barracuda, Pacific	muscle	20	20												M												
006-006	Bass, black sea	muscle	54	54																				M				
		liver	2	2																			L					
007-004	Bass, striped	muscle	112	110												M												
		liver	3	3												L												
012-001	Bluefish	muscle	71	70												M												
		liver	4	4													L											
091-011	Bonito, Atlantic	muscle	14	14												M												
091-009	Bonito, Pacific	muscle	40	38												M												
		liver	1	1											L													
021-007	Bullhead, brown	muscle	4	4											M													
018-014	Butterfish	muscle	71	70												M												
		whole	17	17											W													
		h & g	1	1														H										
021-010	Catfish, channel	muscle	20	19											M													
023-002	Catfish, gafftopsail	muscle	34	34																				M				
		liver	3	3														L										
023-001	Catfish, sea	muscle	45	45																				M				
		liver	6	5																L								
021-002	Catfish, white	muscle	1	1							M																	
033-008	Cod, Atlantic	muscle	114	114														M										
		liver	32	32														L										
033-007	Cod, Pacific (gray)	muscle	56	56																		M						
		liver	15	15															L									
045-026	Croaker, Atlantic	muscle	90	90													M											
033-004	Cusk	muscle	75	75														M										
		liver	17	16														L										
037-004	Cusk-eel, fawn	muscle	1	1																		M						
145-018	Dogfish, smooth	muscle	93	93																			M					
141-007	Dogfish, spiny	muscle	112	112																M								
		liver	29	29																	L							
041-002	Dolphin	muscle	63	63													M											
		liver	25	25													L											
045-019	Drum, banded	muscle	5	5																				M				
045-028	Drum, black	muscle	60	60														M										
		liver	2	2														L										
045-030	Drum, red	muscle	72	71													M											
		liver	2	2													L											
051-001	Eel, American	muscle	30	30											M													
047-002	Eel, conger	muscle	1	1																		M						
153-009	Eulachon	whole	32	32												W												
058-028	Flounder, fourspot	muscle	70	70															M									
058-024	Flounder, Gulf	muscle	37	37													M											
		liver	1	1												L												
058-027	Flounder, southern	muscle	42	42														M										
		liver	1	1													L											
058-026	Flounder, summer (fluke)	muscle	40	40																M								
		liver	2	2													L											
058-030	Flounder, windowpane (s.dab)	muscle	18	18														M										
059-030	Flounder, winter	muscle	122	122															M									
		liver	2	2															L									
059-005	Flounder, witch	muscle	68	68																					M			
059-016	Flounder, yellowtail	muscle	89	89																	M							
		liver	1	1												L												
006-040	Gag	muscle	29	29														M										
066-009	Goatfish	muscle	38	38																M								
068-001	Goosefish	muscle	80	80																		M						
		liver	9	9														L										
		h & g	1	1																				H				
006-037	Grouper, black	muscle	33	33													M											
006-017	Grouper, red	muscle	40	40												M												
006-038	Grouper, yellowmouth	muscle	10	10																	M							
		liver	1	1											L													
073-015	Grunt, bluestriped (yellow)	muscle	16	16													M											

Table 4.2. Distribution of Mean Arsenic Levels in the Resource Survey, by Species (continued)

Ranges of Mean Arsenic Content, ppm[2]

Species Number	Species Finfish	Tissue[1]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
073-014	Grunt, white	muscle	17	17														M										
033-011	Haddock	muscle	75	75																	M							
		liver	16	16																					L			
		whole	1	1																					W			
033-013	Hake, Pacific	muscle	47	47												M												
		liver	1	1													L											
033-020	Hake, red	muscle	64	64																				M				
033-012	Hake, silver (whiting)	muscle	83	83																M								
		liver	3	3															L									
033-024	Hake, spotted	muscle	65	65														M										
033-025	Hake, white	muscle	70	70																	M							
		liver	28	28																				L				
059-011	Halibut, Pacific	muscle	34	34												M												
		liver	14	14															L									
143-001	Hammerhead, scalloped	muscle	12	12															M									
143-005	Hammerhead, smooth	muscle	9	9																	M							
		liver	7	7																						L		
018-011	Harvestfish	muscle	3	3														M										
		whole	16	16													W											
078-011	Herring, Atlantic	muscle	24	24												M												
		whole	63	63												W												
		headed	6	6												E												
		h & g	2	2													H											
078-001	Herring, blueback	whole	1	1												W												
078-012	Herring, Pacific	muscle	14	14														M										
		whole	30	30												W												
078-015	Herring, round	h & g	50	50													H											
006-013	Hind, speckled	muscle	20	20												M												
		liver	6	6														L										
079-068	Jack, (mackerel scad)	muscle	39	39														M										
079-053	Jack, akule	muscle	38	38													M											
079-005	Jack, crevalle	muscle	47	46												M												
		liver	3	3												L												
079-069	Jack, crevalle (Hawaii)	muscle	40	40												M												
149-004	Jacksmelt	whole	20	19												W												
006-016	Jewfish	muscle	7	7													M											
045-024	Kingfish, northern	muscle	6	6														M										
045-021	Kingfish, southern	muscle	14	14													M											
		liver	1	1													L											
200-002	Ladyfish	muscle	1	1																		M						
071-005	Lingcod	muscle	74	74												M												
		liver	11	11											L													
091-013	Mackerel, Atlantic	muscle	79	79												M												
091-012	Mackerel, chub	muscle	30	30												M												
079-034	Mackerel, jack	muscle	10	10											M													
		liver	1	1												L												
		headed	4	4												E												
091-014	Mackerel, king	muscle	104	102													M											
		liver	10	10												L												
		milt	1	1												Q												
		roe	10	10												R												
091-016	Mackerel, Spanish	muscle	104	104													M											
		liver	4	4														L										
144-003	Mako, shortfin	muscle	3	3															M									
		liver	2	2																				L				
011-002	Marlin, blue	muscle	30	29												M												
		liver	10	9													L											
011-005	Marlin, striped	muscle	40	40												M												
		liver	8	8													L											
011-003	Marlin, white	muscle	50	50													M											
		liver	8	8													L											
162-012	Mempachi	muscle	20	20																		M						
		liver	1	1																				L				
078-010	Menhaden, Atlantic	muscle	10	10												M												
		whole	98	97														W										
078-008	Menhaden, Gulf	muscle	49	49													M											
		whole	28	28														W										
		gutted	7	7																	G							
078-009	Menhaden, yellowfin	whole	12	12																	W							
206-001	Milkfish	muscle	40	40												M												

Table 4.2 Distribution of Mean Arsenic Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Arsenic Content, ppm[2]																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
094-010	Mojarra, yellowfin	muscle	10	10												M												
098-003	Mullet, silver (white)	muscle	35	35												M												
098-002	Mullet, striped	muscle	153	149												M												
		liver	5	5																			L					
079-030	Palometa	muscle	2	2																	M							
131-023	Perch, ocean (Pacific)	muscle	27	27													M											
		liver	16	16												L												
131-052	Perch, ocean (redfish)	muscle	80	79													M											
		liver	1	1															L									
006-010	Perch, sand	muscle	1	1												M												
168-005	Perch, shiner	whole	2	2											W													
045-003	Perch, silver	muscle	18	18														M										
007-001	Perch, white	muscle	27	27											M													
		h & g	18	18												H												
079-029	Permit	muscle	9	9																		M						
073-017	Pigfish	muscle	33	32												M												
114-013	Pinfish, spottail	muscle	10	10															M									
		liver	1	1													L											
059-008	Plaice, American (dab)	muscle	68	68																				M				
		whole	1	1															W									
033-017	Pollock	muscle	72	72													M											
		liver	30	30																	L							
033-019	Pollock, walleye (Alaska)	muscle	48	48												M												
		liver	3	3															L									
079-028	Pompano, Florida	muscle	61	61																M								
		liver	4	4															L									
114-014	Porgy, red	muscle	22	22																				M				
		liver	1	1																		L						
056-018	Pout, ocean	muscle	32	32												M												
		liver	2	2														L										
131-061	Rockfish, bocaccio	muscle	46	46												M												
		liver	3	3												L												
131-063	Rockfish, canary	muscle	41	40													M											
		liver																										
131-031	Rockfish, copper	muscle	10	10												M												
131-043	Rockfish, yellowtail	muscle	20	19												M												
079-004	Runner, blue	muscle	56	55													M											
		liver	4	4											L													
126-001	Sablefish	muscle	98	97													M											
		liver	12	12													L											
011-001	Sailfish	muscle	43	43													M											
		liver	2	2												L												
179-020	Salmon, chinook, (king)	muscle	105	105												M												
		liver	20	20												L												
179-017	Salmon, chum (keta)	muscle	52	50												M												
		liver	5	4												L												
179-018	Salmon, coho (silver)	muscle	68	66												M												
		liver	7	6											L													
179-016	Salmon, pink	muscle	29	27												M												
		liver	3	3											L													
179-019	Salmon, sockeye (red)	muscle	60	57												M												
		liver	4	4											L													
079-013	Scad, round	h & g	2	2																			H					
006-041	Scamp	muscle	10	10													M											
		liver	1	1														L										
132-031	Sculpin, longhorn	muscle	1	1												M												
114-016	Scup	muscle	72	72													M											
135-010	Searobin, northern	muscle	76	76												M												
135-011	Searobin, striped	muscle	10	10													M											
045-012	Seatrout, gray (weakfish)	muscle	72	71											M													
		liver	2	2											L													
		whole	10	10												W												
045-007	Seatrout, sand	muscle	18	18												M												
045-010	Seatrout, silver (white)	muscle	43	41												M												
		liver	1	1											L													
045-008	Seatrout, spotted (speckled)	muscle	87	84												M												
		liver	3	3											L													
078-006	Shad, American	muscle	59	59													M											
145-025	Shark, Atlantic, sharpnose	muscle	1	1																				M				
145-006	Shark, blacktip	muscle	16	16																			M					
		liver	4	4																					L			

Table 4.2. Distribution of Mean Arsenic Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Arsenic Content, ppm[2]																							
Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	14																				M				
		liver	7	7																							L	
145-010	Shark, dusky	muscle	3	3																				M				
145-009	Shark, sandbar	muscle	11	11																	M							
		liver	7	7																					L			
144-001	Shark, white	muscle	1	1																			M					
114-001	Sheepshead	muscle	59	59														M										
		liver	2	2																		L						
150-005	Skate, little	muscle	54	54																				M				
		liver	2	2																			L					
150-012	Skate, winter	muscle	2	2																				M				
		liver	1	1														L										
155-005	Snapper, blackfin	muscle	11	11													M											
155-025	Snapper, gray	muscle	39	39														M										
155-008	Snapper, gray (mangrove)	muscle	26	25														M										
155-006	Snapper, red	muscle	33	31													M											
155-024	Snapper, red (ehu)	muscle	38	38																	M							
155-015	Snapper, vermilion	muscle	35	35													M											
		liver	2	2														L										
155-013	Snapper, yellowtail	muscle	43	43												M												
157-004	Snook	muscle	12	12													M											
059-021	Sole, Dover	muscle	64	64																	M							
		liver	3	3															L									
059-022	Sole, English	muscle	70	70																			M					
		liver	4	4																	L							
059-004	Sole, petrale	muscle	53	53																M								
		liver	6	6																	L							
059-006	Sole, rex	muscle	58	57																			M					
059-014	Sole, rock	muscle	10	10															M									
011-004	Spearfish, shortbill	muscle	15	15												M												
		liver	4	3																L								
045-020	Spot	muscle	53	53														M										
166-003	Sturgeon, green	muscle	10	10																			M					
168-001	Surfperch, barred	muscle	20	20												M												
200-003	Tarpon	muscle	12	12																					M			
		liver	2	2																					L			
185-022	Tautog	muscle	14	14												M												
174-003	Tilefish	muscle	59	59															M									
179-028	Trout, cutthroat	muscle	3	3											M													
179-029	Trout, rainbow (steelhead)	muscle	9	9											M													
		liver	1	1								L																
091-019	Tuna, albacore	muscle	40	40													M											
		liver	4	4														L										
091-022	Tuna, bigeye	muscle	37	37													M											
		liver	19	19																				L				
091-021	Tuna, blackfin	muscle	1	1														M										
091-023	Tuna, bluefin	muscle	11	11													M											
		liver	1	1												L												
091-008	Tuna, skipjack	muscle	69	69													M											
		liver	5	5															L									
091-020	Tuna, yellowfin	muscle	77	76												M												
		liver	25	25														L										
091-006	Tunny, little	muscle	47	46												M												
		liver	2	2														L										
091-001	Wahoo	muscle	18	18													M											
		liver	2	2													L											
183-002	Wolffish, Atlantic	muscle	60	60																M								
		liver	14	14																		L						
079-023	Yellowtail	muscle	24	23												M												
	Mollusca																											
187-005	Abalone, green	shucked	10	10																				S				
187-008	Abalone, red	shucked	8	8																				S				
191-003	Clam, butter	shucked	28	28																	S							
191-001	Clam, hard (quahog)	shucked	140	140													S											
191-008	Clam, Pacific littleneck	shucked	1	1														S										
243-002	Clam, razor	shucked	38	38												S												
242-001	Clam, soft	shucked	19	19												S												
244-005	Clam, surf	shucked	23	23												S												
205-001	Octopus (marmuratus)	whole	4	4																				W				
		mantle	34	34																				N				

Table 4.2. Distribution of Mean Arsenic Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue1/	Total # Samples	# samples in mean	Ranges of Mean Arsenic Content, ppm2/																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	148	145													S											
189-002	Oyster, Pacific (giant)	shucked	69	68													S											
190-014	Scallop, Atlantic bay	adductor muscle	20	20												A												
190-016	Scallop, calico	shucked	10	10																		S						
		adductor muscle	19	19														A										
190-028	Scallop, pink	adductor muscle	5	5												A												
190-013	Scallop, sea (smooth)	adductor muscle	11	11													A											
188-003	Squid, Atlantic longfinned	whole	23	23																W								
		mantle	110	110													N											
188-006	Squid, Pacific	whole	50	50												W												
188-014	Squid, shortfinned	mantle	90	90													N											
	Crustacea																											
196-001	Crab, blue	body meat	34	34													B											
		claw meat	5	5													C											
		claw & body meat	52	52															D									
196-011	Crab, dungeness	meat, unk.	39	39															U									
		claw & body meat	6	6																D								
196-012	Crab, king	meat, unk.	20	20														U										
		claw & body meat	9	9															D									
196-006	Crab, red, deep sea	meat, unk.	25	25																				U				
196-003	Crab, rock	meat, unk.	15	15																				U				
196-035	Crab, tanner (bairdi)	meat, unk.	50	50																				U				
194-012	Lobster, northern (American)	body meat	2	2																				B				
		claw meat	2	2																				C				
		tail meat	2	2																				T				
		leg meat	1	1																					F			
		claw & tail meat	79	79																					K			
194-002	Lobster, spiny (Atlantic)	tail meat	39	39																				T				
194-003	Lobster, spiny (Pacific)	tail meat	4	4																					T			
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	17														P										
192-005	Shrimp, brown	tail, peeled	49	47																P								
192-007	Shrimp, ocean	tail, peeled	10	10													P											
192-010	Shrimp, pink	tail, peeled	49	49														P										
192-011	Shrimp, pink (northern)	tail, peeled	64	64																			P					
192-003	Shrimp, royal red	tail, peeled	12	12																							P	
192-004	Shrimp, white	tail, peeled	75	75														P										

1/ The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

2/ Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.3. Distribution of Mean Cadmium Levels in the Resource Survey, by Species

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Cadmium Content, ppm[2]																						
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
078-005	Alewife	muscle	43	41	M																						
		whole	4	4		W																					
001-016	Anchovy, northern	whole	40	40				W																			
001-006	Anchovy, striped	h & g	40	40		H																					
002-002	Argentine, Atlantic	h & g	7	7	H																						
062-014	Ballyhoo	whole	58	58		W																					
005-002	Barracuda, Atlantic	muscle	7	7	M																						
005-001	Barracuda, Pacific	muscle	19	18		M																					
006-006	Bass, black sea	muscle	55	45	M																						
		liver	2	2											L												
007-004	Bass, striped	muscle	117	106	M																						
		liver	3	3											L												
012-001	Bluefish	muscle	73	58	M																						
		liver	4	4		L																					
091-011	Bonito, Atlantic	muscle	15	15	M																						
091-009	Bonito, Pacific	muscle	40	36	M																						
		liver	1	1											L												
021-007	Bullhead, brown	muscle	4	4	M																						
018-014	Butterfish	muscle	72	70	M																						
		whole	17	17		W																					
		h & g	1	1		H																					
021-010	Catfish, channel	muscle	20	19	M																						
023-002	Catfish, gafftopsail	muscle	34	29	M																						
		liver	3	2					L																		
023-001	Catfish, sea	muscle	47	39	M																						
		liver	6	6						L																	
021-002	Catfish, white	muscle	1	1	M																						
033-008	Cod, Atlantic	muscle	113	108	M																						
		liver	36	35			L																				
033-007	Cod, Pacific (gray)	muscle	59	47	M																						
		liver	16	11			L																				
045-026	Croaker, Atlantic	muscle	92	86	M																						
033-004	Cusk	muscle	76	74	M																						
		liver	18	18				L																			
037-004	Cusk-eel, fawn	muscle	2	2		M																					
145-018	Dogfish, smooth	muscle	95	94		M																					
141-007	Dogfish, spiny	muscle	115	105	M																						
		liver	29	28					L																		
041-002	Dolphin	muscle	63	59	M																						
		liver	28	28												L											
045-019	Drum, banded	muscle	5	5	M																						
045-028	Drum, black	muscle	61	54	M																						
		liver	2	2					L																		
045-030	Drum, red	muscle	73	63	M																						
		liver	3	3									L														
051-001	Eel, American	muscle	30	26	M																						
047-002	Eel, conger	muscle	1	1	M																						
153-009	Eulachon	whole	33	31		W																					
058-028	Flounder, fourspot	muscle	71	71	M																						
058-024	Flounder, Gulf	muscle	41	36	M																						
		liver	1	1		L																					
058-027	Flounder, southern	muscle	42	40	M																						
		liver	2	2		L																					
058-026	Flounder, summer (fluke)	muscle	42	30	M																						
		liver	2	2				L																			
058-030	Flounder, windowpane (s.dab)	muscle	18	17	M																						
059-030	Flounder, winter	muscle	123	122	M																						
		liver	2	2			L																				
059-005	Flounder, witch	muscle	70	70	M																						
059-016	Flounder, yellowtail	muscle	89	89	M																						
		liver	2	2				L																			
006-040	Gag	muscle	30	28	M																						
066-009	Goatfish	muscle	40	39	M																						
068-001	Goosefish	muscle	81	81	M																						
		liver	10	10			L																				
		h & g	1	0	H																						
006-037	Grouper, black	muscle	34	32	M																						
006-017	Grouper, red	muscle	41	38	M																						
006-038	Grouper, yellowmouth	muscle	10	8	M																						
		liver	1	1												L											
073-015	Grunt, bluestriped (yellow)	muscle	16	16	M																						

Table 4.3. Distribution of Mean Cadmium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Cadmium Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
073-014	Grunt, white	muscle	17	17	M																							
033-011	Haddock	muscle	77	74	M																							
		liver	17	17			L																					
		whole	1	0	W																							
033-013	Hake, Pacific	muscle	49	38	M																							
		liver	1	1							L																	
033-020	Hake, red	muscle	65	65	M																							
033-012	Hake, silver (whiting)	muscle	81	79	M																							
		liver	3	3		L																						
033-024	Hake, spotted	muscle	65	65	M																							
033-025	Hake, white	muscle	69	66	M																							
		liver	31	29	L																							
059-011	Halibut, Pacific	muscle	37	30	M																							
		liver	16	16											L													
143-001	Hammerhead, scalloped	muscle	12	12	M																							
143-005	Hammerhead, smooth	muscle	10	10	M																							
		liver	7	7											L													
018-011	Harvestfish	muscle	3	3	M																							
		whole	16	16		W																						
078-011	Herring, Atlantic	muscle	24	24	M																							
		whole	63	63		W																						
		headed	6	6	E																							
		h & g	2	2		H																						
078-001	Herring, blueback	whole	1	1	W																							
078-012	Herring, Pacific	muscle	14	12	M																							
		whole	30	30		W																						
078-015	Herring, round	h & g	50	50		H																						
006-013	Hind, speckled	muscle	20	20	M																							
		liver	7	7							L																	
079-068	Jack, (mackerel scad)	muscle	39	38	M																							
079-053	Jack, akule	muscle	39	36	M																							
079-005	Jack, crevalle	muscle	49	41	M																							
		liver	4	4											L													
079-069	Jack, crevalle (Hawaii)	muscle	40	40	M																							
149-004	Jacksmelt	whole	20	20		W																						
006-016	Jewfish	muscle	8	6	M																							
045-024	Kingfish, northern	muscle	6	6	M																							
045-021	Kingfish, southern	muscle	14	14	M																							
		liver	1	1				L																				
200-002	Ladyfish	muscle	2	1		M																						
071-005	Lingcod	muscle	78	66	M																							
		liver	13	13							L																	
091-013	Mackerel, Atlantic	muscle	80	80	M																							
091-012	Mackerel, chub	muscle	30	30		M																						
079-034	Mackerel, jack	muscle	10	10	M																							
		liver	1	1																				L				
		headed	4	4		E																						
091-014	Mackerel, king	muscle	107	91	M																							
		liver	10	10										L														
		milt	1	1	Q																							
		roe	11	11	R																							
091-016	Mackerel, Spanish	muscle	108	89	M																							
		liver	4	4			L																					
144-003	**Mako**, shortfin	muscle	3	3	M																							
		liver	2	2							L																	
011-002	Marlin, blue	muscle	33	29		M																						
		liver	11	11																				L				
011-005	Marlin, striped	muscle	40	37		M																						
		liver	9	9														L										
011-003	Marlin, white	muscle	53	51		M																						
		liver	9	9																	L							
162-012	Mempachi	muscle	20	17	M																							
		liver	1	1																					L			
078-010	Menhaden, Atlantic	muscle	10	10	M																							
		whole	100	100			W																					
078-008	Menhaden, Gulf	muscle	50	48	M																							
		whole	28	28		W																						
		gutted	9	9			G																					
078-009	Menhaden, yellowfin	whole	13	13		W																						
206-001	Milkfish	muscle	40	37	M																							

Table 4.3. Distribution of Mean Cadmium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue1/	Total # Samples	# samples in mean	Ranges of Mean Cadmium Content, ppm2/ < 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
094-010	Mojarra, yellowfin	muscle	10	6	M																							
098-003	Mullet, silver (white)	muscle	36	36	M																							
098-002	Mullet, striped	muscle	158	142	M																							
		liver	5	5				L																				
079-030	Palometa	muscle	2	1	M																							
131-023	Perch, ocean (Pacific)	muscle	30	22	M																							
		liver	18	18											L													
131-052	Perch, ocean (redfish)	muscle	80	78	M																							
		liver	2	2				L																				
006-010	Perch, sand	muscle	1	1	M																							
168-005	Perch, shiner	whole	2	2		W																						
045-003	Perch, silver	muscle	20	19	M																							
007-001	Perch, white	muscle	27	27	M																							
		h & g	19	18		H																						
079-029	Permit	muscle	9	6	M																							
073-017	Pigfish	muscle	34	32	M																							
114-013	Pinfish, spottail	muscle	10	10	M																							
		liver	1	1											L													
059-008	Plaice, American (dab)	muscle	68	67	M																							
		whole	1	1		W																						
033-017	Pollock	muscle	73	68	M																							
		liver	32	32			L																					
033-019	Pollock, walleye (Alaska)	muscle	48	44	M																							
		liver	3	3				L																				
079-028	Pompano, Florida	muscle	60	55	M																							
		liver	4	4												L												
114-014	Porgy, red	muscle	22	21	M																							
		liver	1	1																	L							
056-018	Pout, ocean	muscle	34	34	M																							
		liver	3	3										L														
131-061	Rockfish, bocaccio	muscle	48	36	M																							
		liver	4	4				L																				
131-063	Rockfish, canary	muscle	43	30	M																							
		liver	1	1												L												
131-031	Rockfish, copper	muscle	10	10	M																							
131-043	Rockfish, yellowtail	muscle	20	10	M																							
079-004	Runner, blue	muscle	55	53	M																							
		liver	4	4											L													
126-001	Sablefish	muscle	103	80	M																							
		liver	14	14												L												
011-001	Sailfish	muscle	42	40	M																							
		liver	3	3												L												
179-020	Salmon, chinook, (king)	muscle	109	104	M																							
		liver	22	22					L																			
179-017	Salmon, chum (keta)	muscle	57	52	M																							
		liver	5	5									L															
179-018	Salmon, coho (silver)	muscle	68	64	M																							
		liver	7	7						L																		
179-016	Salmon, pink	muscle	27	24	M																							
		liver	3	3					L																			
179-019	Salmon, sockeye (red)	muscle	61	57	M																							
		liver	4	4							L																	
079-013	Scad, round	h & g	3	2		H																						
006-041	Scamp	muscle	10	10	M																							
		liver	1	1											L													
132-031	Sculpin, longhorn	muscle	1	1	M																							
114-016	Scup	muscle	72	68	M																							
135-010	Searobin, northern	muscle	78	77	M																							
135-011	Searobin, striped	muscle	10	10	M																							
045-012	Seatrout, gray (weakfish)	muscle	72	68	M																							
		liver	3	3			L																					
		whole	10	10		W																						
045-007	Seatrout, sand	muscle	18	17	M																							
045-010	Seatrout, silver (white)	muscle	44	44	M																							
		liver	1	1					L																			
045-008	Seatrout, spotted (speckled)	muscle	89	66	M																							
		liver	3	2		L																						
078-006	Shad, American	muscle	60	56	M																							
145-025	Shark, Atlantic, sharpnose	muscle	1	1	M																							
145-006	Shark, blacktip	muscle	16	16	M																							
		liver	4	4							L																	

Table 4.3. Distribution of Mean Cadmium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	Ranges of Mean Cadmium Content, ppm[2/] < 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	14	M																							
		liver	9	9														L										
145-010	Shark, dusky	muscle	4	4	M																							
145-009	Shark, sandbar	muscle	13	13	M																							
		liver	6	5				L																				
144-001	Shark, white	muscle	2	2	M																							
114-001	Sheepshead	muscle	60	55	M																							
		liver	2	2					L																			
150-005	Skate, little	muscle	54	54	M																							
		liver	2	2								L																
150-012	Skate, winter	muscle	2	2		M																						
		liver	1	1			L																					
155-005	Snapper, blackfin	muscle	13	13	M																							
155-025	Snapper, gray	muscle	40	40	M																							
155-008	Snapper, gray (mangrove)	muscle	28	27	M																							
155-006	Snapper, red	muscle	38	26	M																							
155-024	Snapper, red (ehu)	muscle	40	40	M																							
155-015	Snapper, vermilion	muscle	36	31	M																							
		liver	2	2														L										
155-013	Snapper, yellowtail	muscle	43	41	M																							
157-004	Snook	muscle	12	12	M																							
059-021	Sole, Dover	muscle	70	56	M																							
		liver	4	4											L													
059-022	Sole, English	muscle	73	53	M																							
		liver	5	5									L															
059-004	Sole, petrale	muscle	56	46	M																							
		liver	7	7								L																
059-006	Sole, rex	muscle	61	44	M																							
059-014	Sole, rock	muscle	10	10	M																							
011-004	Spearfish, shortbill	muscle	15	15	M																							
		liver	4	4											L													
045-020	Spot	muscle	54	43	M																							
166-003	Sturgeon, green	muscle	10	8	M																							
168-001	Surfperch, barred	muscle	20	20	M																							
200-003	Tarpon	muscle	12	11	M																							
		liver	2	2																		L						
185-022	Tautog	muscle	14	14	M																							
174-003	Tilefish	muscle	60	59	M																							
179-028	Trout, cutthroat	muscle	3	3	M																							
179-029	Trout, rainbow (steelhead)	muscle	8	8	M																							
		liver	1	1					L																			
091-019	Tuna, albacore	muscle	40	36	M																							
		liver	5	5														L										
091-022	Tuna, bigeye	muscle	40	35	M																							
		liver	21	21																		L						
091-021	Tuna, blackfin	muscle	1	1	M																							
091-023	Tuna, bluefin	muscle	11	10	M																							
		liver	1	1												L												
091-008	Tuna, skipjack	muscle	70	63	M																							
		liver	8	8																L								
091-020	Tuna, yellowfin	muscle	80	76	M																							
		liver	26	26																		L						
091-006	Tunny, little	muscle	50	50	M																							
		liver	2	2													L											
091-001	Wahoo	muscle	18	17		M																						
		liver	3	3												L												
183-002	Wolffish, Atlantic	muscle	60	59	M																							
		liver	15	15											L													
079-023	Yellowtail	muscle	23	23	M																							
	Mollusca																											
187-005	Abalone, green	shucked	10	10												S												
187-008	Abalone, red	shucked	10	9		S																						
191-003	Clam, butter	shucked	28	28			S																					
191-001	Clam, hard (quahog)	shucked	141	141			S																					
191-008	Clam, Pacific littleneck	shucked	1	1		S																						
243-002	Clam, razor	shucked	39	37		S																						
242-001	Clam, soft	shucked	19	19			S																					
244-005	Clam, surf	shucked	23	23		S																						
205-001	Octopus (marmuratus)	whole	4	4							W																	
		mantle	35	35				N																				

Table 4.3. Distribution of Mean Cadmium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Cadmium Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	151	151										S														
189-002	Oyster, Pacific (giant)	shucked	70	69											S													
190-014	Scallop, Atlantic bay	adductor muscle	20	20		A																						
190-016	Scallop, calico	shucked	10	10											S													
		adductor muscle	20	20												A												
190-028	Scallop, pink	adductor muscle	5	5	A																							
190-013	Scallop, sea (smooth)	adductor muscle	10	10											A													
188-003	Squid, Atlantic longfinned	whole	23	23		W																						
		mantle	110	110		N																						
188-006	Squid, Pacific	whole	50	50								W																
188-014	Squid, shortfinned	mantle	92	92		N																						
	Crustacea																											
196-001	Crab, blue	body meat	32	32		B																						
		claw meat	5	5		C																						
		claw & body meat	54	54		D																						
196-011	Crab, dungeness	meat, unk.	42	42		U																						
		claw & body meat	8	6		D																						
196-012	Crab, king	meat, unk.	20	20		U																						
		claw & body meat	9	9			D																					
196-006	Crab, red, deep sea	meat, unk.	25	25		U																						
196-003	Crab, rock	meat, unk.	15	15				U																				
196-035	Crab, tanner (bairdi)	meat, unk.	48	48			U																					
194-012	Lobster, northern (American)	body meat	2	2																				B				
		claw meat	2	2		C																						
		tail meat	2	2					T																			
		leg meat	2	2		F																						
		claw & tail meat	78	78			K																					
194-002	Lobster, spiny (Atlantic)	tail meat	39	37	T																							
194-003	Lobster, spiny (Pacific)	tail meat	5	5			T																					
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	17		P																						
192-005	Shrimp, brown	tail, peeled	53	46	P																							
192-007	Shrimp, ocean	tail, peeled	8	8		P																						
192-010	Shrimp, pink	tail, peeled	49	48		P																						
192-011	Shrimp, pink (northern)	tail, peeled	64	64		P																						
192-003	Shrimp, royal red	tail, peeled	12	12		P																						
192-004	Shrimp, white	tail, peeled	75	62	P																							

[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.4. Distribution of Mean Chromium Levels in the Resource Survey, by Species

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Chromium Content, ppm[2]																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
078-005	Alewife	muscle	43	42		M																						
		whole	4	4			W																					
001-016	Anchovy, northern	whole	40	40				W																				
001-006	Anchovy, striped	h & g	37	37			H																					
002-002	Argentine, Atlantic	h & g	7	7			H																					
062-014	Ballyhoo	whole	57	56					W																			
005-002	Barracuda, Atlantic	muscle	7	7			M																					
005-001	Barracuda, Pacific	muscle	20	18				M																				
006-006	Bass, black sea	muscle	55	51		M																						
		liver	2	2			L																					
007-004	Bass, striped	muscle	116	108		M																						
		liver	3	3		L																						
012-001	Bluefish	muscle	73	70			M																					
		liver	4	4		L																						
091-011	Bonito, Atlantic	muscle	15	15			M																					
091-009	Bonito, Pacific	muscle	40	39			M																					
		liver	1	1		L																						
021-007	Bullhead, brown	muscle	4	4		M																						
018-014	Butterfish	muscle	70	70			M																					
		whole	17	17				W																				
		h & g	1	1				H																				
021-010	Catfish, channel	muscle	20	19		M																						
023-002	Catfish, gafftopsail	muscle	33	33		M																						
		liver	3	3		L																						
023-001	Catfish, sea	muscle	46	45		M																						
		liver	6	6				L																				
021-002	Catfish, white	muscle	1	1	M																							
033-008	Cod, Atlantic	muscle	113	109		M																						
		liver	36	30		L																						
033-007	Cod, Pacific (gray)	muscle	59	55		M																						
		liver	16	14		L																						
045-026	Croaker, Atlantic	muscle	90	88		M																						
033-004	Cusk	muscle	75	73		M																						
		liver	18	12	L																							
037-004	Cusk-eel, fawn	muscle	2	2			M																					
145-018	Dogfish, smooth	muscle	93	89			M																					
141-007	Dogfish, spiny	muscle	114	108		M																						
		liver	28	21	L																							
041-002	Dolphin	muscle	63	61		M																						
		liver	27	25		L																						
045-019	Drum, banded	muscle	5	5					M																			
045-028	Drum, black	muscle	61	58			M																					
		liver	2	2		L																						
045-030	Drum, red	muscle	69	65		M																						
		liver	3	3		L																						
051-001	Eel, American	muscle	29	27			M																					
047-002	Eel, conger	muscle	1	1		M																						
153-009	Eulachon	whole	33	32			W																					
058-028	Flounder, fourspot	muscle	69	66			M																					
058-024	Flounder, Gulf	muscle	41	40		M																						
		liver	1	1											L													
058-027	Flounder, southern	muscle	42	41		M																						
		liver	2	2				L																				
058-026	Flounder, summer (fluke)	muscle	41	38		M																						
		liver	2	2					L																			
058-030	Flounder, windowpane (s.dab)	muscle	15	14		M																						
059-030	Flounder, winter	muscle	122	118			M																					
		liver	2	2	L																							
059-005	Flounder, witch	muscle	71	63		M																						
059-016	Flounder, yellowtail	muscle	87	87		M																						
		liver	2	2			L																					
006-040	Gag	muscle	30	29		M																						
066-009	Goatfish	muscle	39	38		M																						
068-001	Goosefish	muscle	79	76		M																						
		liver	10	8		L																						
		h & g	1	1								H																
006-037	Grouper, black	muscle	33	31		M																						
006-017	Grouper, red	muscle	40	38			M																					
006-038	Grouper, yellowmouth	muscle	10	10		M																						
		liver	1	1	L																							
073-015	Grunt, bluestriped (yellow)	muscle	14	13		M																						

Table 4.4. Distribution of Mean Chromium Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Chromium Content, ppm2/																									
Species Number	Species	Tissue1/	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																													
073-014	Grunt, white	muscle	16	16			M																							
033-011	Haddock	muscle	77	75		M																								
		liver	18	16		L																								
		whole	1	1	W																									
033-013	Hake, Pacific	muscle	49	44		M																								
		liver	1	1	L																									
033-020	Hake, red	muscle	65	60			M																							
033-012	Hake, silver (whiting)	muscle	82	81		M																								
		liver	3	2	L																									
033-024	Hake, spotted	muscle	65	62			M																							
033-025	Hake, white	muscle	69	63		M																								
		liver	31	21			L																							
059-011	Halibut, Pacific	muscle	37	35			M																							
		liver	16	16			L																							
143-001	Hammerhead, scalloped	muscle	11	11		M																								
143-005	Hammerhead, smooth	muscle	10	10			M																							
		liver	7	7		L																								
018-011	Harvestfish	muscle	3	3		M																								
		whole	16	16				W																						
078-011	Herring, Atlantic	muscle	24	23		M																								
		whole	63	63				W																						
		headed	6	6			E																							
		h & g	2	2			H																							
078-001	Herring, blueback	whole	1	1	W																									
078-012	Herring, Pacific	muscle	14	14			M																							
		whole	30	30				W																						
078-015	Herring, round	h & g	49	49				H																						
006-013	Hind, speckled	muscle	20	19		M																								
		liver	7	5		L																								
079-068	Jack, (mackerel scad)	muscle	38	38			M																							
079-053	Jack, akule	muscle	39	37		M																								
079-005	Jack, crevalle	muscle	48	44			M																							
		liver	4	4		L																								
079-069	Jack, crevalle (Hawaii)	muscle	40	39		M																								
149-004	Jacksmelt	whole	20	20			W																							
006-016	Jewfish	muscle	8	8		M																								
045-024	Kingfish, northern	muscle	6	6	M																									
045-021	Kingfish, southern	muscle	13	13			M																							
		liver	1	1		L																								
200-002	Ladyfish	muscle	2	2					M																					
071-005	Lingcod	muscle	77	75		M																								
		liver	13	12				L																						
091-013	Mackerel, Atlantic	muscle	78	74			M																							
091-012	Mackerel, chub	muscle	30	29		M																								
079-034	Mackerel, jack	muscle	10	9		M																								
		liver	1	1		L																								
		headed	4	4		E																								
091-014	Mackerel, king	muscle	105	100		M																								
		liver	10	10		L																								
		milt	1	1		Q																								
		roe	11	10		R																								
091-016	Mackerel, Spanish	muscle	108	102		M																								
		liver	4	3		L																								
144-003	Mako, shortfin	muscle	3	3		M																								
		liver	2	2		L																								
011-002	Marlin, blue	muscle	32	32		M																								
		liver	11	10					L																					
011-005	Marlin, striped	muscle	39	36			M																							
		liver	8	8		L																								
011-003	Marlin, white	muscle	53	52		M																								
		liver	10	10		L																								
162-012	Mempachi	muscle	20	19		M																								
		liver	1	1		L																								
078-010	Menhaden, Atlantic	muscle	10	10			M																							
		whole	101	101							W																			
078-008	Menhaden, Gulf	muscle	50	50			M																							
		whole	28	28								W																		
		gutted	9	9											G															
078-009	Menhaden, yellowfin	whole	13	13					W																					
206-001	Milkfish	muscle	40	39		M																								

Table 4.4. Distribution of Mean Chromium Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Chromium Content, ppm2/																							
Species Number	Species	Tissue1/	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
094-010	Mojarra, yellowfin	muscle	10	10			M																					
098-003	Mullet, silver (white)	muscle	33	30			M																					
098-002	Mullet, striped	muscle	154	152		M																						
		liver	5	5		L																						
079-030	Palometa	muscle	2	2		M																						
131-023	Perch, ocean (Pacific)	muscle	30	27			M																					
		liver	18	17		L																						
131-052	Perch, ocean (redfish)	muscle	80	70		M																						
		liver	2	2			L																					
006-010	Perch, sand	muscle	1	1	M																							
168-005	Perch, shiner	whole	2	2					W																			
045-003	Perch, silver	muscle	20	20		M																						
007-001	Perch, white	muscle	25	25			M																					
		h & g	19	19					H																			
079-029	Permit	muscle	9	9		M																						
073-017	Pigfish	muscle	34	33			M																					
114-013	Pinfish, spottail	muscle	10	10		M																						
		liver	1	1			L																					
059-008	Plaice, American (dab)	muscle	65	59		M																						
		whole	1	1						W																		
033-017	Pollock	muscle	72	68		M																						
		liver	33	25		L																						
033-019	Pollock, walleye (Alaska)	muscle	48	43			M																					
		liver	3	3		L																						
079-028	Pompano, Florida	muscle	59	57		M																						
		liver	4	3		L																						
114-014	Porgy, red	muscle	22	20			M																					
		liver	1	1				L																				
056-018	Pout, ocean	muscle	34	34		M																						
		liver	3	3			L																					
131-061	Rockfish, bocaccio	muscle	48	46			M																					
		liver	4	4		L																						
131-063	Rockfish, canary	muscle	44	41			M																					
		liver	1	1				L																				
131-031	Rockfish, copper	muscle	10	10		M																						
131-043	Rockfish, yellowtail	muscle	20	19			M																					
079-004	Runner, blue	muscle	53	53			M																					
		liver	4	4			L																					
126-001	Sablefish	muscle	103	99			M																					
		liver	14	14				L																				
011-001	Sailfish	muscle	41	41		M																						
		liver	3	3		L																						
179-020	Salmon, chinook, (king)	muscle	108	105		M																						
		liver	22	21		L																						
179-017	Salmon, chum (keta)	muscle	54	52		M																						
		liver	5	4		L																						
179-018	Salmon, coho (silver)	muscle	65	62			M																					
		liver	7	7			L																					
179-016	Salmon, pink	muscle	27	25		M																						
		liver	3	3		L																						
179-019	Salmon, sockeye (red)	muscle	59	54		M																						
		liver	4	4		L																						
079-013	Scad, round	h & g	3	3					H																			
006-041	Scamp	muscle	10	10		M																						
		liver	1	1		L																						
132-031	Sculpin, longhorn	muscle	1	1		M																						
114-016	Scup	muscle	72	69			M																					
135-010	Searobin, northern	muscle	76	75			M																					
135-011	Searobin, striped	muscle	9	8		M																						
045-012	Seatrout, gray (weakfish)	muscle	71	70		M																						
		liver	3	3		L																						
		whole	10	10				W																				
045-007	Seatrout, sand	muscle	18	18		M																						
045-010	Seatrout, silver (white)	muscle	41	39		M																						
		liver	1	1		L																						
045-008	Seatrout, spotted (speckled)	muscle	88	85			M																					
		liver	3	3		L																						
078-006	Shad, American	muscle	59	57		M																						
145-025	Shark, Atlantic, sharpnose	muscle	1	1	M																							
145-006	Shark, blacktip	muscle	16	16			M																					
		liver	4	4		L																						

Table 4.4. Distribution of Mean Chromium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Chromium Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	13		M																						
		liver	9	4		L																						
145-010	Shark, dusky	muscle	4	4		M																						
145-009	Shark, sandbar	muscle	13	11		M																						
		liver	7	4		L																						
144-001	Shark, white	muscle	2	2			M																					
114-001	Sheepshead	muscle	58	56			M																					
		liver	2	2		L																						
150-005	Skate, little	muscle	52	52				M																				
		liver	2	1				L																				
150-012	Skate, winter	muscle	2	2			M																					
		liver	1	1					L																			
155-005	Snapper, blackfin	muscle	13	12		M																						
155-025	Snapper, gray	muscle	38	35				M																				
155-008	Snapper, gray (mangrove)	muscle	27	27				M																				
155-006	Snapper, red	muscle	37	36			M																					
155-024	Snapper, red (ehu)	muscle	39	39			M																					
155-015	Snapper, vermilion	muscle	36	35			M																					
		liver	2	2			L																					
155-013	Snapper, yellowtail	muscle	41	40			M																					
157-004	Snook	muscle	12	12			M																					
059-021	Sole, Dover	muscle	70	63			M																					
		liver	4	4				L																				
059-022	Sole, English	muscle	73	68			M																					
		liver	5	5			L																					
059-004	Sole, petrale	muscle	56	50		M																						
		liver	7	6				L																				
059-006	Sole, rex	muscle	61	59			M																					
059-014	Sole, rock	muscle	10	9		M																						
011-004	Spearfish, shortbill	muscle	15	15		M																						
		liver	4	4				L																				
045-020	Spot	muscle	54	53			M																					
166-003	Sturgeon, green	muscle	10	8		M																						
168-001	Surfperch, barred	muscle	20	19		M																						
200-003	Tarpon	muscle	12	12			M																					
		liver	2	2			L																					
185-022	Tautog	muscle	14	14		M																						
174-003	Tilefish	muscle	59	54		M																						
179-028	Trout, cutthroat	muscle	3	3				M																				
179-029	Trout, rainbow (steelhead)	muscle	9	9		M																						
		liver	1	1	L																							
091-019	Tuna, albacore	muscle	40	39			M																					
		liver	5	5			L																					
091-022	Tuna, bigeye	muscle	40	35		M																						
		liver	21	19		L																						
091-021	Tuna, blackfin	muscle	1	1		M																						
091-023	Tuna, bluefin	muscle	11	11		M																						
		liver	1	1		L																						
091-008	Tuna, skipjack	muscle	69	62		M																						
		liver	8	7			L																					
091-020	Tuna, yellowfin	muscle	80	77		M																						
		liver	26	24			L																					
091-006	Tunny, little	muscle	46	43			M																					
		liver	2	2				L																				
091-001	Wahoo	muscle	18	16				M																				
		liver	3	2			L																					
183-002	Wolffish, Atlantic	muscle	60	55		M																						
		liver	15	15		L																						
079-023	Yellowtail	muscle	23	23				M																				
	Mollusca																											
187-005	Abalone, green	shucked	10	10					S																			
187-008	Abalone, red	shucked	10	10			S																					
191-003	Clam, butter	shucked	29	29						S																		
191-001	Clam, hard (quahog)	shucked	141	138				S																				
191-008	Clam, Pacific littleneck	shucked	1	1		S																						
243-002	Clam, razor	shucked	39	39				S																				
242-001	Clam, soft	shucked	18	18			S																					
244-005	Clam, surf	shucked	23	23				S																				
205-001	Octopus (marmuratus)	whole	4	4		W																						
		mantle	36	35		N																						

Table 4.4. Distribution of Mean Chromium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Chromium Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	150	142				S																				
189-002	Oyster, Pacific (giant)	shucked	70	67				S																				
190-014	Scallop, Atlantic bay	adductor muscle	20	19			A																					
190-016	Scallop, calico	shucked	10	10								S																
		adductor muscle	19	18		A																						
190-028	Scallop, pink	adductor muscle	5	5				A																				
190-013	Scallop, sea (smooth)	adductor muscle	10	9				A																				
188-003	Squid, Atlantic longfinned	whole	23	23				W																				
		mantle	106	105			N																					
188-006	Squid, Pacific	whole	49	47		W																						
188-014	Squid, shortfinned	mantle	90	86			N																					
	Crustacea																											
196-001	Crab, blue	body meat	35	35			B																					
		claw meat	5	5				C																				
		claw & body meat	54	53			D																					
196-011	Crab, dungeness	meat, unk.	41	39		U																						
		claw & body meat	8	8			D																					
196-012	Crab, king	meat, unk.	20	20			U																					
		claw & body meat	9	8		D																						
196-006	Crab, red, deep sea	meat, unk.	24	24			U																					
196-003	Crab, rock	meat, unk.	15	15			U																					
196-035	Crab, tanner (bairdi)	meat, unk.	47	45		U																						
194-012	Lobster, northern (American)	body meat	2	2						B																		
		claw meat	2	1				C																				
		tail meat	2	2		T																						
		leg meat	2	2		F																						
		claw & tail meat	79	78		K																						
194-002	Lobster, spiny (Atlantic)	tail meat	40	38		T																						
194-003	Lobster, spiny (Pacific)	tail meat	5	5		T																						
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	16		P																						
192-005	Shrimp, brown	tail, peeled	52	48			P																					
192-007	Shrimp, ocean	tail, peeled	10	10			P																					
192-010	Shrimp, pink	tail, peeled	50	50			P																					
192-011	Shrimp, pink (northern)	tail, peeled	61	60			P																					
192-003	Shrimp, royal red	tail, peeled	12	12		P																						
192-004	Shrimp, white	tail, peeled	77	73			P																					

[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.5. Distribution of Mean Copper Levels in the Resource Survey, by Species

					Ranges of Mean Copper Content, ppm[2/]																							
Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 110.0
	Finfish																											
078-005	Alewife	muscle	43	43								M																
		whole	4	4									W															
001-016	Anchovy, northern	whole	40	40											W													
001-006	Anchovy, striped	h & g	39	39					H																			
002-002	Argentine, Atlantic	h & g	7	7					H																			
062-014	Ballyhoo	whole	57	57						W																		
005-002	Barracuda, Atlantic	muscle	7	7					M																			
005-001	Barracuda, Pacific	muscle	20	20					M																			
006-006	Bass, black sea	muscle	54	52		M																						
		liver	2	2														L										
007-004	Bass, striped	muscle	116	116			M																					
		liver	3	3														L										
012-001	Bluefish	muscle	73	73					M																			
		liver	4	4														L										
091-011	Bonito, Atlantic	muscle	15	15											M													
091-009	Bonito, Pacific	muscle	39	38									M															
		liver	1	1														L										
021-007	Bullhead, brown	muscle	4	4							M																	
018-014	Butterfish	muscle	71	71						M																		
		whole	17	17					W																			
		h & g	1	1									H															
021-010	Catfish, channel	muscle	20	20				M																				
023-002	Catfish, gafftopsail	muscle	34	34				M																				
		liver	3	3											L													
023-001	Catfish, sea	muscle	47	47				M																				
		liver	6	6														L										
021-002	Catfish, white	muscle	1	1					M																			
033-008	Cod, Atlantic	muscle	112	112			M																					
		liver	35	35														L										
033-007	Cod, Pacific (gray)	muscle	59	58			M																					
		liver	16	15													L											
045-026	Croaker, Atlantic	muscle	92	92					M																			
033-004	Cusk	muscle	74	74		M																						
		liver	16	16											L													
037-004	Cusk-eel, fawn	muscle	2	2									M															
145-018	Dogfish, smooth	muscle	94	94				M																				
141-007	Dogfish, spiny	muscle	114	114				M																				
		liver	28	28											L													
041-002	Dolphin	muscle	63	63					M																			
		liver	28	28																		L						
045-019	Drum, banded	muscle	5	5				M																				
045-028	Drum, black	muscle	61	60			M																					
		liver	2	2																				L				
045-030	Drum, red	muscle	72	71			M																					
		liver	3	2																			L					
051-001	Eel, American	muscle	30	30			M																					
047-002	Eel, conger	muscle	1	1			M																					
153-009	Eulachon	whole	33	33										W														
058-028	Flounder, fourspot	muscle	71	71			M																					
058-024	Flounder, Gulf	muscle	40	40		M																						
		liver	1	1																				L				
058-027	Flounder, southern	muscle	41	41			M																					
		liver	2	2																					L			
058-026	Flounder, summer (fluke)	muscle	42	40			M																					
		liver	2	2																				L				
058-030	Flounder, windowpane (s.dab)	muscle	18	18				M																				
059-030	Flounder, winter	muscle	122	122			M																					
		liver	2	2																	L							
059-005	Flounder, witch	muscle	71	71		M																						
059-016	Flounder, yellowtail	muscle	89	89				M																				
		liver	2	2												L												
006-040	Gag	muscle	29	29		M																						
066-009	Goatfish	muscle	40	40			M																					
068-001	Goosefish	muscle	81	81			M																					
		liver	9	9																		L						
		h & g	1	1							H																	
006-037	Grouper, black	muscle	33	33		M																						
006-017	Grouper, red	muscle	41	41			M																					
006-038	Grouper, yellowmouth	muscle	10	10		M																						
		liver	1	1																			L					
073-015	Grunt, bluestriped (yellow)	muscle	16	16			M																					

Table 4.5. Distribution of Mean Copper Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue1/	Total # Samples	# samples in mean	Ranges of Mean Copper Content, ppm2/																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 110.0
	Finfish																											
073-014	Grunt, white	muscle	17	17			M																					
033-011	Haddock	muscle	77	77			M																					
		liver	18	18														L										
		whole	1	1							W																	
033-013	Hake, Pacific	muscle	49	49			M																					
		liver	1	1																	L							
033-020	Hake, red	muscle	64	63			M																					
033-012	Hake, silver (whiting)	muscle	83	83				M																				
		liver	3	3														L										
033-024	Hake, spotted	muscle	64	64				M																				
033-025	Hake, white	muscle	70	70			M																					
		liver	30	30																L								
059-011	Halibut, Pacific	muscle	37	36			M																					
		liver	15	15													L											
143-001	Hammerhead, scalloped	muscle	12	12						M																		
143-005	Hammerhead, smooth	muscle	9	8					M																			
		liver	7	7												L												
018-011	Harvestfish	muscle	3	3			M																					
		whole	16	16					W																			
078-011	Herring, Atlantic	muscle	24	24									M															
		whole	63	63											W													
		headed	6	6											E													
		h & g	2	2											H													
078-001	Herring, blueback	whole	1	1									W															
078-012	Herring, Pacific	muscle	14	14								M																
		whole	30	30											W													
078-015	Herring, round	h & g	50	50											H													
006-013	Hind, speckled	muscle	19	19				M																				
		liver	7	7																	L							
079-068	Jack, (mackerel scad)	muscle	39	39											M													
079-053	Jack, akule	muscle	38	38											M													
079-005	Jack, crevalle	muscle	48	48									M															
		liver	4	4																		L						
079-069	Jack, crevalle (Hawaii)	muscle	40	40				M																				
149-004	Jacksmelt	whole	20	20							W																	
006-016	Jewfish	muscle	8	8		M																						
045-024	Kingfish, northern	muscle	6	6			M																					
045-021	Kingfish, southern	muscle	13	13				M																				
		liver	1	1												L												
200-002	Ladyfish	muscle	2	2							M																	
071-005	Lingcod	muscle	76	74			M																					
		liver	13	13																				L				
091-013	Mackerel, Atlantic	muscle	80	80								M																
091-012	Mackerel, chub	muscle	29	29								M																
079-034	Mackerel, jack	muscle	10	10					M																			
		liver	1	1												L												
		headed	4	4							E																	
091-014	Mackerel, king	muscle	107	107			M																					
		liver	10	10																		L						
		milt	1	1															Q									
		roe	11	11											R													
091-016	Mackerel, Spanish	muscle	107	105				M																				
		liver	4	4													L											
144-003	**Mako**, shortfin	muscle	3	3				M																				
		liver	2	2														L										
011-002	Marlin, blue	muscle	33	33			M																					
		liver	11	11																				L				
011-005	Marlin, striped	muscle	38	37				M																				
		liver	8	8																	L							
011-003	Marlin, white	muscle	53	53			M																					
		liver	10	10																				L				
162-012	Mempachi	muscle	20	20			M																					
		liver	1	1																					L			
078-010	Menhaden, Atlantic	muscle	10	10											M													
		whole	100	99											W													
078-008	Menhaden, Gulf	muscle	49	49									M															
		whole	28	28								W																
		gutted	9	9								G																
078-009	Menhaden, yellowfin	whole	13	13								W																
206-001	Milkfish	muscle	40	40				M																				

Table 4.5. Distribution of Mean Copper Levels in the Resource Survey, by Species (continued)

Ranges of Mean Copper Content, ppm$^{2/}$

Species Number	Species	Tissue$^{1/}$	Total # Samples	# samples in mean	<0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 110.0
	Finfish																										
094-010	Mojarra, yellowfin	muscle	10	9			M																					
098-003	Mullet, silver (white)	muscle	36	36					M																			
098-002	Mullet, striped	muscle	157	157					M																			
		liver	5	5																									L
079-030	Palometa	muscle	2	2			M																					
131-023	Perch, ocean (Pacific)	muscle	30	30			M																					
		liver	18	18												L												
131-052	Perch, ocean (redfish)	muscle	79	79			M																					
		liver	2	2													L											
006-010	Perch, sand	muscle	1	1		M																						
168-005	Perch, shiner	whole	2	2								W																
045-003	Perch, silver	muscle	20	20				M																				
007-001	Perch, white	muscle	27	27							M																	
		h & g	19	19											H													
079-029	Permit	muscle	9	9				M																				
073-017	Pigfish	muscle	34	34				M																				
114-013	Pinfish, spottail	muscle	10	10					M																			
		liver	1	1													L											
059-008	Plaice, American (dab)	muscle	67	67			M																					
		whole	1	1					W																			
033-017	Pollock	muscle	73	73					M																			
		liver	33	33														L										
033-019	Pollock, walleye (Alaska)	muscle	48	48					M																			
		liver	3	3												L												
079-028	Pompano, Florida	muscle	58	58				M																				
		liver	4	4																				L				
114-014	Porgy, red	muscle	22	22			M																					
		liver	1	1																L								
056-018	Pout, ocean	muscle	34	34				M																				
		liver	3	3													L											
131-061	Rockfish, bocaccio	muscle	48	47			M																					
		liver	4	4												L												
131-063	Rockfish, canary	muscle	44	44				M																				
		liver	1	1											L													
131-031	Rockfish, copper	muscle	10	9			M																					
131-043	Rockfish, yellowtail	muscle	20	20			M																					
079-004	Runner, blue	muscle	55	55									M															
		liver	4	4												L												
126-001	Sablefish	muscle	103	100			M																					
		liver	14	14													L											
011-001	Sailfish	muscle	42	42					M																			
		liver	3	3																L								
179-020	Salmon, chinook, (king)	muscle	110	108					M																			
		liver	22	22																				L				
179-017	Salmon, chum (keta)	muscle	57	57						M																		
		liver	5	5																							L	
179-018	Salmon, coho (silver)	muscle	67	67						M																		
		liver	7	7																				L				
179-016	Salmon, pink	muscle	27	27								M																
		liver	3	3																					L			
179-019	Salmon, sockeye (red)	muscle	60	60						M																		
		liver	4	4																									L
079-013	Scad, round	h & g	3	3										H														
006-041	Scamp	muscle	10	10		M																						
		liver	1	1																				L				
132-031	Sculpin, longhorn	muscle	1	1			M																					
114-016	Scup	muscle	70	70						M																		
135-010	Searobin, northern	muscle	78	78					M																			
135-011	Searobin, striped	muscle	9	9						M																		
045-012	Seatrout, gray (weakfish)	muscle	72	72				M																				
		liver	3	3															L									
		whole	10	10					W																			
045-007	Seatrout, sand	muscle	18	18				M																				
045-010	Seatrout, silver (white)	muscle	44	44			M																					
		liver	1	1																				L				
045-008	Seatrout, spotted (speckled)	muscle	88	85			M																					
		liver	3	3																L								
078-006	Shad, American	muscle	60	60							M																	
145-025	Shark, Atlantic, sharpnose	muscle	1	1											M													
145-006	Shark, blacktip	muscle	15	15				M																				
		liver	4	4											L													

Table 4.5. Distribution of Mean Copper Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Copper Content, ppm[2]																							
Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 110.0
	Finfish																											
145-023	Shark, blue	muscle	13	13					M																			
		liver	9	9											L													
145-010	Shark, dusky	muscle	4	4				M																				
145-009	Shark, sandbar	muscle	13	13					M																			
		liver	7	7											L													
144-001	Shark, white	muscle	2	2								M																
114-001	Sheepshead	muscle	60	60				M																				
		liver	2	2																						L		
150-005	Skate, little	muscle	52	52					M																			
		liver	2	2												L												
150-012	Skate, winter	muscle	2	2			M																					
		liver	1	1															L									
155-005	Snapper, blackfin	muscle	13	13			M																					
155-025	Snapper, gray	muscle	40	40			M																					
155-008	Snapper, gray (mangrove)	muscle	28	28				M																				
155-006	Snapper, red	muscle	38	36			M																					
155-024	Snapper, red (ehu)	muscle	40	40				M																				
155-015	Snapper, vermilion	muscle	36	36			M																					
		liver	2	2																L								
155-013	Snapper, yellowtail	muscle	43	43			M																					
157-004	Snook	muscle	12	12		M																						
059-021	Sole, Dover	muscle	70	68		M																						
		liver	4	4												L												
059-022	Sole, English	muscle	73	71			M																					
		liver	5	5														L										
059-004	Sole, petrale	muscle	57	57			M																					
		liver	7	7															L									
059-006	Sole, rex	muscle	61	59		M																						
059-014	Sole, rock	muscle	10	10			M																					
011-004	Spearfish, shortbill	muscle	14	14					M																			
		liver	4	4															L									
045-020	Spot	muscle	54	54					M																			
166-003	Sturgeon, green	muscle	10	10					M																			
168-001	Surfperch, barred	muscle	20	20				M																				
200-003	Tarpon	muscle	12	12			M																					
		liver	2	2																								L
185-022	Tautog	muscle	13	13			M																					
174-003	Tilefish	muscle	60	60			M																					
179-028	Trout, cutthroat	muscle	3	3						M																		
179-029	Trout, rainbow (steelhead)	muscle	9	9				M																				
		liver	1	1																							L	
091-019	Tuna, albacore	muscle	40	40				M																				
		liver	5	5																L								
091-022	Tuna, bigeye	muscle	40	39				M																				
		liver	21	21																				L				
091-021	Tuna, blackfin	muscle	1	1											M													
091-023	Tuna, bluefin	muscle	11	11										M														
		liver	1	1																		L						
091-008	Tuna, skipjack	muscle	69	69									M															
		liver	8	8																L								
091-020	Tuna, yellowfin	muscle	80	80							M																	
		liver	26	26																				L				
091-006	Tunny, little	muscle	50	50								M																
		liver	2	2															L									
091-001	Wahoo	muscle	18	17				M																				
		liver	3	3																					L			
183-002	Wolffish, Atlantic	muscle	58	58			M																					
		liver	14	14																				L				
079-023	Yellowtail	muscle	24	24						M																		
	Mollusca																											
187-005	Abalone, green	shucked	10	10												S												
187-008	Abalone, red	shucked	10	10								S																
191-003	Clam, butter	shucked	27	27											S													
191-001	Clam, hard (quahog)	shucked	140	140												S												
191-008	Clam, Pacific littleneck	shucked	1	1													S											
243-002	Clam, razor	shucked	39	39								S																
242-001	Clam, soft	shucked	19	19														S										
244-005	Clam, surf	shucked	23	23							S																	
205-001	Octopus (marmuratus)	whole	4	4																				W				
		mantle	36	36																			N					

Table 4.5. Distribution of Mean Copper Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Copper Content, ppm[2]																							
Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 110.0
	Mollusca																											
189-001	Oyster, eastern	shucked	151	151																						S		
189-002	Oyster, Pacific (giant)	shucked	70	70																				S				
190-014	Scallop, Atlantic bay	adductor muscle	20	20				A																				
190-016	Scallop, calico	shucked	10	10															S									
		adductor muscle	20	20			A																					
190-028	Scallop, pink	adductor muscle	5	5			A																					
190-013	Scallop, sea (smooth)	adductor muscle	11	11			A																					
188-003	Squid, Atlantic longfinned	whole	22	22																						W		
		mantle	110	110															N									
188-006	Squid, Pacific	whole	50	50																					W			
188-014	Squid, shortfinned	mantle	92	92															N									
	Crustacea																											
196-001	Crab, blue	body meat	35	35																B								
		claw meat	5	5																		C						
		claw & body meat	54	54																D								
196-011	Crab, dungeness	meat, unk.	42	42															U									
		claw & body meat	8	8																				D				
196-012	Crab, king	meat, unk.	19	19																				U				
		claw & body meat	9	9																D								
196-006	Crab, red, deep sea	meat, unk.	25	25																U								
196-003	Crab, rock	meat, unk.	15	15																	U							
196-035	Crab, tanner (bairdi)	meat, unk.	50	50														U										
194-012	Lobster, northern (American)	body meat	2	2																				B				
		claw meat	2	2																					C			
		tail meat	2	2																T								
		leg meat	2	2																				F				
		claw & tail meat	79	79																				K				
194-002	Lobster, spiny (Atlantic)	tail meat	40	40													T											
194-003	Lobster, spiny (Pacific)	tail meat	5	5																			T					
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	17															P									
192-005	Shrimp, brown	tail, peeled	53	53													P											
192-007	Shrimp, ocean	tail, peeled	10	10											P													
192-010	Shrimp, pink	tail, peeled	50	50												P												
192-011	Shrimp, pink (northern)	tail, peeled	63	63												P												
192-003	Shrimp, royal red	tail, peeled	12	12													P											
192-004	Shrimp, white	tail, peeled	74	74												P												

[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.6. Distribution of Mean Lead Levels in the Resource Survey, by Species.

Species Number	Species Finfish	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Lead Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
078-005	Alewife	muscle	43	43						M																		
		whole	4	4										W														
001-016	Anchovy, northern	whole	40	40											W													
001-006	Anchovy, striped	h & g	40	40									H															
002-002	Argentine, Atlantic	h & g	7	7						H																		
062-014	Ballyhoo	whole	58	58											W													
005-002	Barracuda, Atlantic	muscle	7	7												M												
005-001	Barracuda, Pacific	muscle	20	20							M																	
006-006	Bass, black sea	muscle	55	52					M																			
		liver	2	2												L												
007-004	Bass, striped	muscle	116	114					M																			
		liver	3	3						L																		
012-001	Bluefish	muscle	72	71						M																		
		liver	4	4						L																		
091-011	Bonito, Atlantic	muscle	15	15				M																				
091-009	Bonito, Pacific	muscle	40	40						M																		
		liver	1	1						L																		
021-007	Bullhead, brown	muscle	4	4							M																	
018-014	Butterfish	muscle	70	69					M																			
		whole	17	17								W																
		h & g	1	1									H															
021-010	Catfish, channel	muscle	20	20				M																				
023-002	Catfish, gafftopsail	muscle	33	33				M																				
		liver	3	3					L																			
023-001	Catfish, sea	muscle	46	44					M																			
		liver	6	6											L													
021-002	Catfish, white	muscle	1	1				M																				
033-008	Cod, Atlantic	muscle	113	112					M																			
		liver	35	35					L																			
033-007	Cod, Pacific (gray)	muscle	59	57				M																				
		liver	16	15				L																				
045-026	Croaker, Atlantic	muscle	90	88						M																		
033-004	Cusk	muscle	73	73					M																			
		liver	18	17				L																				
037-004	Cusk-eel, fawn	muscle	2	2											M													
145-018	Dogfish, smooth	muscle	95	95										M														
141-007	Dogfish, spiny	muscle	113	110					M																			
		liver	29	29				L																				
041-002	Dolphin	muscle	63	62					M																			
		liver	27	27						L																		
045-019	Drum, banded	muscle	5	5						M																		
045-028	Drum, black	muscle	59	58						M																		
		liver	2	2					L																			
045-030	Drum, red	muscle	72	70					M																			
		liver	3	3						L																		
051-001	Eel, American	muscle	29	28					M																			
047-002	Eel, conger	muscle	1	1			M																					
153-009	Eulachon	whole	33	33								W																
058-028	Flounder, fourspot	muscle	68	68				M																				
058-024	Flounder, Gulf	muscle	41	40					M																			
		liver	1	1		L																						
058-027	Flounder, southern	muscle	41	41					M																			
		liver	2	2				L																				
058-026	Flounder, summer (fluke)	muscle	41	38					M																			
		liver	1	1						L																		
058-030	Flounder, windowpane (s.dab)	muscle	18	17						M																		
059-030	Flounder, winter	muscle	123	123				M																				
		liver	2	2										L														
059-005	Flounder, witch	muscle	71	71				M																				
059-016	Flounder, yellowtail	muscle	88	88					M																			
		liver	2	2										L														
006-040	Gag	muscle	30	30					M																			
066-009	Goatfish	muscle	39	39					M																			
068-001	Goosefish	muscle	79	79				M																				
		liver	10	10					L																			
		h & g	1	1				H																				
006-037	Grouper, black	muscle	34	33					M																			
006-017	Grouper, red	muscle	41	41				M																				
006-038	Grouper, yellowmouth	muscle	10	10						M																		
		liver	1	1	L																							
073-015	Grunt, bluestriped (yellow)	muscle	15	15						M																		

Table 4.6. Distribution of Mean Lead Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Lead Content, ppm[2]																								
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
073-014	Grunt, white	muscle	17	17							M																			
033-011	Haddock	muscle	76	76					M																					
		liver	18	18						L																				
		whole	1	1					W																					
033-013	Hake, Pacific	muscle	49	48							M																			
		liver	1	1									L																	
033-020	Hake, red	muscle	65	65						M																				
033-012	Hake, silver (whiting)	muscle	82	81						M																				
		liver	3	3							L																			
033-024	Hake, spotted	muscle	64	64					M																					
033-025	Hake, white	muscle	69	69					M																					
		liver	31	30				L																						
059-011	Halibut, Pacific	muscle	37	35						M																				
		liver	16	16							L																			
143-001	Hammerhead, scalloped	muscle	12	12												M													
143-005	Hammerhead, smooth	muscle	10	10								M																		
		liver	7	7							L																			
018-011	Harvestfish	muscle	3	3				M																						
		whole	15	15										W																
078-011	Herring, Atlantic	muscle	24	24							M																			
		whole	63	63												W													
		headed	6	6										E																
		h & g	2	2												H													
078-001	Herring, blueback	whole	1	1							W																			
078-012	Herring, Pacific	muscle	14	14						M																				
		whole	30	30												W													
078-015	Herring, round	h & g	48	48										H																
006-013	Hind, speckled	muscle	20	20						M																				
		liver	6	6					L																					
079-068	Jack, (mackerel scad)	muscle	40	39								M																		
079-053	Jack, akule	muscle	38	37						M																				
079-005	Jack, crevalle	muscle	49	48						M																				
		liver	4	4												L													
079-069	Jack, crevalle (Hawaii)	muscle	38	38					M																					
149-004	Jacksmelt	whole	20	20												W													
006-016	Jewfish	muscle	8	8						M																				
045-024	Kingfish, northern	muscle	6	6					M																					
045-021	Kingfish, southern	muscle	14	14							M																			
		liver	1	1			L																							
200-002	Ladyfish	muscle	2	2					M																					
071-005	Lingcod	muscle	78	76						M																				
		liver	13	13								L																		
091-013	Mackerel, Atlantic	muscle	76	76						M																				
091-012	Mackerel, chub	muscle	30	30								M																		
079-034	Mackerel, jack	muscle	9	9						M																				
		liver	1	1							L																			
		headed	4	4											E														
091-014	Mackerel, king	muscle	107	105						M																				
		liver	10	10							L																			
		milt	1	1					Q																					
		roe	11	11				R																						
091-016	Mackerel, Spanish	muscle	108	103						M																				
		liver	4	4					L																					
144-003	Mako, shortfin	muscle	3	3									M																	
		liver	2	2				L																						
011-002	Marlin, blue	muscle	33	30					M																					
		liver	11	11								L																		
011-005	Marlin, striped	muscle	39	37									M																	
		liver	9	7											L														
011-003	Marlin, white	muscle	53	53						M																				
		liver	10	10								L																		
162-012	Mempachi	muscle	20	17						M																				
		liver	1	1					L																					
078-010	Menhaden, Atlantic	muscle	10	10							M																			
		whole	100	100												W													
078-008	Menhaden, Gulf	muscle	49	49								M																		
		whole	28	28													W												
		gutted	9	9													G												
078-009	Menhaden, yellowfin	whole	13	13												W													
206-001	Milkfish	muscle	40	39						M																				

Table 4.6. Distribution of Mean Lead Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Lead Content, ppm[2]																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
094-010	Mojarra, yellowfin	muscle	10	10							M																	
098-003	Mullet, silver (white)	muscle	36	36					M																			
098-002	Mullet, striped	muscle	155	151					M																			
		liver	5	5					L																			
079-030	Palometa	muscle	2	2				M																				
131-023	Perch, ocean (Pacific)	muscle	30	27					M																			
		liver	18	18				L																				
131-052	Perch, ocean (redfish)	muscle	79	79					M																			
		liver	2	2					L																			
006-010	Perch, sand	muscle	1	1		M																						
168-005	Perch, shiner	whole	2	2											W													
045-003	Perch, silver	muscle	20	20						M																		
007-001	Perch, white	muscle	27	27							M																	
		h & g	19	19											H													
079-029	Permit	muscle	9	9								M																
073-017	Pigfish	muscle	33	33						M																		
114-013	Pinfish, spottail	muscle	10	10							M																	
		liver	1	1								L																
059-008	Plaice, American (dab)	muscle	66	66				M																				
		whole	1	1											W													
033-017	Pollock	muscle	72	72					M																			
		liver	32	29			L																					
033-019	Pollock, walleye (Alaska)	muscle	48	48						M																		
		liver	3	3					L																			
079-028	Pompano, Florida	muscle	57	56				M																				
		liver	4	4					L																			
114-014	Porgy, red	muscle	22	22						M																		
		liver	1	1							L																	
056-018	Pout, ocean	muscle	34	34				M																				
		liver	3	3					L																			
131-061	Rockfish, bocaccio	muscle	48	46					M																			
		liver	4	4			L																					
131-063	Rockfish, canary	muscle	44	41						M																		
		liver	1	1											L													
131-031	Rockfish, copper	muscle	10	10						M																		
131-043	Rockfish, yellowtail	muscle	20	19				M																				
079-004	Runner, blue	muscle	54	54						M																		
		liver	4	4					L																			
126-001	Sablefish	muscle	103	99					M																			
		liver	14	14				L																				
011-001	Sailfish	muscle	41	41				M																				
		liver	3	3				L																				
179-020	Salmon, chinook, (king)	muscle	110	108					M																			
		liver	20	19						L																		
179-017	Salmon, chum (keta)	muscle	55	55					M																			
		liver	5	5			L																					
179-018	Salmon, coho (silver)	muscle	67	65					M																			
		liver	7	7					L																			
179-016	Salmon, pink	muscle	26	25				M																				
		liver	3	3			L																					
179-019	Salmon, sockeye (red)	muscle	58	57					M																			
		liver	4	4		L																						
079-013	Scad, round	h & g	3	3											H													
006-041	Scamp	muscle	10	10				M																				
		liver	1	1							L																	
132-031	Sculpin, longhorn	muscle	1	1			M																					
114-016	Scup	muscle	71	70							M																	
135-010	Searobin, northern	muscle	76	76						M																		
135-011	Searobin, striped	muscle	10	10							M																	
045-012	Seatrout, gray (weakfish)	muscle	70	69					M																			
		liver	3	3					L																			
		whole	10	10											W													
045-007	Seatrout, sand	muscle	18	18					M																			
045-010	Seatrout, silver (white)	muscle	38	38				M																				
		liver	1	1											L													
045-008	Seatrout, spotted (speckled)	muscle	88	80					M																			
		liver	3	3				L																				
078-006	Shad, American	muscle	60	60					M																			
145-025	Shark, Atlantic, sharpnose	muscle	1	1							M																	
145-006	Shark, blacktip	muscle	16	16							M																	
		liver	4	4				L																				

Table 4.6. Distribution of Mean Lead Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Lead Content, ppm[2/]																							
Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	14						M																		
		liver	9	9				L																				
145-010	Shark, dusky	muscle	4	4								M																
145-009	Shark, sandbar	muscle	13	13											M													
		liver	7	6							L																	
144-001	Shark, white	muscle	2	2			M																					
114-001	Sheepshead	muscle	55	55					M																			
		liver	2	2							L																	
150-005	Skate, little	muscle	54	54							M																	
		liver	2	2										L														
150-012	Skate, winter	muscle	2	2										M														
		liver	1	1							L																	
155-005	Snapper, blackfin	muscle	12	12					M																			
155-025	Snapper, gray	muscle	39	39						M																		
155-008	Snapper, gray (mangrove)	muscle	28	27						M																		
155-006	Snapper, red	muscle	35	34					M																			
155-024	Snapper, red (ehu)	muscle	39	39					M																			
155-015	Snapper, vermilion	muscle	36	35					M																			
		liver	2	2						L																		
155-013	Snapper, yellowtail	muscle	41	41				M																				
157-004	Snook	muscle	12	12				M																				
059-021	Sole, Dover	muscle	69	66						M																		
		liver	4	4						L																		
059-022	Sole, English	muscle	73	71						M																		
		liver	5	5									L															
059-004	Sole, petrale	muscle	57	56						M																		
		liver	7	7					L																			
059-006	Sole, rex	muscle	61	60					M																			
059-014	Sole, rock	muscle	10	10					M																			
011-004	Spearfish, shortbill	muscle	14	14						M																		
		liver	4	4					L																			
045-020	Spot	muscle	54	53						M																		
166-003	Sturgeon, green	muscle	10	8				M																				
168-001	Surfperch, barred	muscle	20	20								M																
200-003	Tarpon	muscle	12	12						M																		
		liver	2	2							L																	
185-022	Tautog	muscle	14	14						M																		
174-003	Tilefish	muscle	60	60					M																			
179-028	Trout, cutthroat	muscle	3	3				M																				
179-029	Trout, rainbow (steelhead)	muscle	9	9						M																		
		liver	1	1			L																					
091-019	Tuna, albacore	muscle	36	35					M																			
		liver	5	4										L														
091-022	Tuna, bigeye	muscle	40	40					M																			
		liver	21	21						L																		
091-021	Tuna, blackfin	muscle	1	1				M																				
091-023	Tuna, bluefin	muscle	11	10						M																		
		liver	1	0	L																							
091-008	Tuna, skipjack	muscle	70	68						M																		
		liver	8	8							L																	
091-020	Tuna, yellowfin	muscle	80	77							M																	
		liver	26	25						L																		
091-006	Tunny, little	muscle	50	50					M																			
		liver	2	2								L																
091-001	Wahoo	muscle	18	17					M																			
		liver	3	3			L																					
183-002	Wolffish, Atlantic	muscle	57	57				M																				
		liver	15	15					L																			
079-023	Yellowtail	muscle	21	20						M																		
	Mollusca																											
187-005	Abalone, green	shucked	10	10									S															
187-008	Abalone, red	shucked	10	9						S																		
191-003	Clam, butter	shucked	29	28							S																	
191-001	Clam, hard (quahog)	shucked	140	139								S																
191-008	Clam, Pacific littleneck	shucked	1	1			S																					
243-002	Clam, razor	shucked	38	38						S																		
242-001	Clam, soft	shucked	19	19						S																		
244-005	Clam, surf	shucked	22	22						S																		
205-001	Octopus (marmuratus)	whole	4	4							W																	
		mantle	35	35							N																	

Table 4.6. Distribution of Mean Lead Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Lead Content, ppm[2] < 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	151	149							S																	
189-002	Oyster, Pacific (giant)	shucked	70	64							S																	
190-014	Scallop, Atlantic bay	adductor muscle	20	20					A																			
190-016	Scallop, calico	shucked	10	10											S													
		adductor muscle	19	18					A																			
190-028	Scallop, pink	adductor muscle	5	5			A																					
190-013	Scallop, sea (smooth)	adductor muscle	11	11					A																			
188-003	Squid, Atlantic longfinned	whole	22	22						W																		
		mantle	107	107						N																		
188-006	Squid, Pacific	whole	50	49							W																	
188-014	Squid, shortfinned	mantle	91	91							N																	
	Crustacea																											
196-001	Crab, blue	body meat	35	35								B																
		claw meat	5	5									C															
		claw & body meat	54	54							K																	
196-011	Crab, dungeness	meat, unk.	41	40							U																	
		claw & body meat	8	8								D																
196-012	Crab, king	meat, unk.	20	20								U																
		claw & body meat	8	8					D																			
196-006	Crab, red, deep sea	meat, unk.	24	24						U																		
196-003	Crab, rock	meat, unk.	15	15									U															
196-035	Crab, tanner (bairdi)	meat, unk.	41	41					U																			
194-012	Lobster, northern (American)	body meat	2	2					B																			
		claw meat	2	2							C																	
		tail meat	2	2						T																		
		leg meat	2	2										F														
		claw & tail meat	80	80						K																		
194-002	Lobster, spiny (Atlantic)	tail meat	40	40							T																	
194-003	Lobster, spiny (Pacific)	tail meat	5	5						T																		
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	17							P																	
192-005	Shrimp, brown	tail, peeled	53	52							P																	
192-007	Shrimp, ocean	tail, peeled	10	10							P																	
192-010	Shrimp, pink	tail, peeled	49	49							P																	
192-011	Shrimp, pink (northern)	tail, peeled	64	64						P																		
192-003	Shrimp, royal red	tail, peeled	12	12							P																	
192-004	Shrimp, white	tail, peeled	77	73							P																	

1/ The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

2/ Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.7. Distribution of Mean Manganese Levels in the Resource Survey, by Species

					Ranges of Mean Manganese Content, ppm[2]																						
Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
078-005	Alewife	muscle	42	42				M																			
		whole	4	4											W												
001-016	Anchovy, northern	whole	40	40												W											
001-006	Anchovy, striped	h & g	40	40											H												
002-002	Argentine, Atlantic	h & g	7	7				H																			
062-014	Ballyhoo	whole	57	57								W															
005-002	Barracuda, Atlantic	muscle	7	7		M																					
005-001	Barracuda, Pacific	muscle	20	20		M																					
006-006	Bass, black sea	muscle	55	53		M																					
		liver	2	2											L												
007-004	Bass, striped	muscle	112	110		M																					
		liver	3	3											L												
012-001	Bluefish	muscle	73	73		M																					
		liver	4	4										L													
091-011	Bonito, Atlantic	muscle	15	15		M																					
091-009	Bonito, Pacific	muscle	40	40		M																					
		liver	1	1								L															
021-007	Bullhead, brown	muscle	4	4						M																	
018-014	Butterfish	muscle	71	71		M																					
		whole	17	17											W												
		h & g	1	1											H												
021-010	Catfish, channel	muscle	20	20		M																					
023-002	Catfish, gafftopsail	muscle	34	33		M																					
		liver	3	3							L																
023-001	Catfish, sea	muscle	47	47			M																				
		liver	6	6											L												
021-002	Catfish, white	muscle	1	1			M																				
033-008	Cod, Atlantic	muscle	113	113		M																					
		liver	35	35							L																
033-007	Cod, Pacific (gray)	muscle	58	54		M																					
		liver	15	15											L												
045-026	Croaker, Atlantic	muscle	92	91			M																				
033-004	Cusk	muscle	76	76		M																					
		liver	18	18							L																
037-004	Cusk-eel, fawn	muscle	2	2											M												
145-018	Dogfish, smooth	muscle	95	95		M																					
141-007	Dogfish, spiny	muscle	115	114		M																					
		liver	29	29				L																			
041-002	Dolphin	muscle	63	62		M																					
		liver	28	28										L													
045-019	Drum, banded	muscle	5	5			M																				
045-028	Drum, black	muscle	61	59		M																					
		liver	2	2										L													
045-030	Drum, red	muscle	73	73		M																					
		liver	3	3									L														
051-001	Eel, American	muscle	30	30				M																			
047-002	Eel, conger	muscle	1	1			M																				
153-009	Eulachon	whole	33	33						W																	
058-028	Flounder, fourspot	muscle	71	71			M																				
058-024	Flounder, Gulf	muscle	40	40			M																				
		liver	1	1											L												
058-027	Flounder, southern	muscle	42	42			M																				
		liver	2	2									L														
058-026	Flounder, summer (fluke)	muscle	42	42			M																				
		liver	2	2									L														
058-030	Flounder, windowpane (s.dab)	muscle	18	18			M																				
059-030	Flounder, winter	muscle	123	123		M																					
		liver	2	2									L														
059-005	Flounder, witch	muscle	70	70		M																					
059-016	Flounder, yellowtail	muscle	89	89		M																					
		liver	2	2											L												
006-040	Gag	muscle	30	28	M																						
066-009	Goatfish	muscle	40	40		M																					
068-001	Goosefish	muscle	79	78		M																					
		liver	10	10				L																			
		h & g	1	1	H																						
006-037	Grouper, black	muscle	34	33	M																						
006-017	Grouper, red	muscle	41	40	M																						
006-038	Grouper, yellowmouth	muscle	10	10	M																						
		liver	1	1											L												
073-015	Grunt, bluestriped (yellow)	muscle	16	16		M																					

Table 4.7. Distribution of Mean Manganese Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Manganese Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
073-014	Grunt, white	muscle	17	17		M																						
033-011	Haddock	muscle	77	77			M																					
		liver	18	18											L													
		whole	1	1					W																			
033-013	Hake, Pacific	muscle	49	48			M																					
		liver	1	1											L													
033-020	Hake, red	muscle	65	65		M																						
033-012	Hake, silver (whiting)	muscle	83	82		M																						
		liver	3	3											L													
033-024	Hake, spotted	muscle	65	65			M																					
033-025	Hake, white	muscle	70	70		M																						
		liver	31	31							L																	
059-011	Halibut, Pacific	muscle	37	36		M																						
		liver	16	16							L																	
143-001	Hammerhead, scalloped	muscle	12	12		M																						
143-005	Hammerhead, smooth	muscle	10	10		M																						
		liver	7	7											L													
018-011	Harvestfish	muscle	3	3		M																						
		whole	16	16											W													
078-011	Herring, Atlantic	muscle	24	24				M																				
		whole	63	63											W													
		headed	6	6									E															
		h & g	2	2								H																
078-001	Herring, blueback	whole	1	1						W																		
078-012	Herring, Pacific	muscle	14	14					M																			
		whole	30	30											W													
078-015	Herring, round	h & g	50	50									H															
006-013	Hind, speckled	muscle	19	19	M																							
		liver	7	7					L																			
079-068	Jack, (mackerel scad)	muscle	40	40		M																						
079-053	Jack, akule	muscle	39	39		M																						
079-005	Jack, crevalle	muscle	48	48		M																						
		liver	4	4											L													
079-069	Jack, crevalle (Hawaii)	muscle	40	40		M																						
149-004	Jacksmelt	whole	20	20							W																	
006-016	Jewfish	muscle	8	8	M																							
045-024	Kingfish, northern	muscle	6	6			M																					
045-021	Kingfish, southern	muscle	14	14		M																						
		liver	1	1											L													
200-002	Ladyfish	muscle	2	2			M																					
071-005	Lingcod	muscle	78	77		M																						
		liver	13	13						L																		
091-013	Mackerel, Atlantic	muscle	80	80		M																						
091-012	Mackerel, chub	muscle	29	28		M																						
079-034	Mackerel, jack	muscle	10	10		M																						
		liver	1	1											L													
		headed	4	4		E																						
091-014	Mackerel, king	muscle	107	105	M																							
		liver	10	10										L														
		milt	1	1		Q																						
		roe	11	11						R																		
091-016	Mackerel, Spanish	muscle	109	107		M																						
		liver	4	4							L																	
144-003	Mako, shortfin	muscle	3	3	M																							
		liver	2	2			L																					
011-002	Marlin, blue	muscle	32	30		M																						
		liver	11	11											L													
011-005	Marlin, striped	muscle	40	39		M																						
		liver	9	9											L													
011-003	Marlin, white	muscle	54	53		M																						
		liver	10	10								L																
162-012	Mempachi	muscle	20	18		M																						
		liver	1	1							L																	
078-010	Menhaden, Atlantic	muscle	10	10								M																
		whole	101	101															W									
078-008	Menhaden, Gulf	muscle	50	50							M																	
		whole	28	27																			W					
		gutted	9	9															G									
078-009	Menhaden, yellowfin	whole	13	13											W													
206-001	Milkfish	muscle	40	40		M																						

Table 4.7. Distribution of Mean Manganese Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Manganese Content, ppm[2/]																							
Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																										
094-010	Mojarra, yellowfin	muscle	10	10		M																					
098-003	Mullet, silver (white)	muscle	36	36		M																					
098-002	Mullet, striped	muscle	158	158			M																				
		liver	5	5										L														
079-030	Palometa	muscle	2	2		M																					
131-023	Perch, ocean (Pacific)	muscle	30	27		M																					
		liver	18	18									L																
131-052	Perch, ocean (redfish)	muscle	80	80		M																					
		liver	2	2								L																	
006-010	Perch, sand	muscle	1	1		M																					
168-005	Perch, shiner	whole	2	2												W												
045-003	Perch, silver	muscle	20	20		M																					
007-001	Perch, white	muscle	27	27						M																		
		h & g	19	19													H											
079-029	Permit	muscle	9	8		M																					
073-017	Pigfish	muscle	33	33					M																			
114-013	Pinfish, spottail	muscle	9	9		M																					
		liver	1	1											L													
059-008	Plaice, American (dab)	muscle	68	68		M																					
		whole	1	1													W											
033-017	Pollock	muscle	73	73		M																					
		liver	33	33								L																	
033-019	Pollock, walleye (Alaska)	muscle	47	46		M																					
		liver	3	3										L															
079-028	Pompano, Florida	muscle	60	59	M																						
		liver	4	4									L																
114-014	Porgy, red	muscle	22	22		M																					
		liver	1	1												L												
056-018	Pout, ocean	muscle	34	34		M																					
		liver	3	3									L																
131-061	Rockfish, bocaccio	muscle	48	43		M																					
		liver	4	4								L																	
131-063	Rockfish, canary	muscle	43	40		M																					
		liver	1	1									L																
131-031	Rockfish, copper	muscle	10	10		M																					
131-043	Rockfish, yellowtail	muscle	20	20		M																					
079-004	Runner, blue	muscle	55	54		M																					
		liver	4	4									L																
126-001	Sablefish	muscle	103	99		M																					
		liver	14	14										L															
011-001	Sailfish	muscle	42	42		M																					
		liver	3	3									L																
179-020	Salmon, chinook, (king)	muscle	109	108		M																					
		liver	22	22									L																
179-017	Salmon, chum (keta)	muscle	57	57		M																					
		liver	5	5										L															
179-018	Salmon, coho (silver)	muscle	68	68		M																					
		liver	7	7										L															
179-016	Salmon, pink	muscle	27	27		M																					
		liver	3	3								L																	
179-019	Salmon, sockeye (red)	muscle	62	62		M																					
		liver	4	4									L																
079-013	Scad, round	h & g	3	3										H															
006-041	Scamp	muscle	10	10	M																						
		liver	1	1												L												
132-031	Sculpin, longhorn	muscle	1	1			M																				
114-016	Scup	muscle	71	71				M																			
135-010	Searobin, northern	muscle	78	78			M																				
135-011	Searobin, striped	muscle	10	10			M																				
045-012	Seatrout, gray (weakfish)	muscle	72	72		M																					
		liver	3	3											L													
		whole	10	10												W												
045-007	Seatrout, sand	muscle	18	18			M																				
045-010	Seatrout, silver (white)	muscle	43	39		M																					
		liver	1	1												L												
045-008	Seatrout, spotted (speckled)	muscle	89	86		M																					
		liver	3	3										L															
078-006	Shad, American	muscle	60	60				M																			
145-025	Shark, Atlantic, sharpnose	muscle	1	1	M																						
145-006	Shark, blacktip	muscle	16	16		M																					
		liver	4	4										L															

Table 4.7. Distribution of Mean Manganese Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Manganese Content, ppm[2]																							
Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	13	13		M																						
		liver	9	9									L															
145-010	Shark, dusky	muscle	4	4			M																					
145-009	Shark, sandbar	muscle	13	13	M																							
		liver	7	7						L																		
144-001	Shark, white	muscle	2	2	M																							
114-001	Sheepshead	muscle	60	60		M																						
		liver	2	2											L													
150-005	Skate, little	muscle	53	53								M																
		liver	2	2							L																	
150-012	Skate, winter	muscle	2	2											M													
		liver	1	1							L																	
155-005	Snapper, blackfin	muscle	13	13	M																							
155-025	Snapper, gray	muscle	40	40		M																						
155-008	Snapper, gray (mangrove)	muscle	28	28		M																						
155-006	Snapper, red	muscle	38	36		M																						
155-024	Snapper, red (ehu)	muscle	40	40																								
155-015	Snapper, vermilion	muscle	36	36	M																							
		liver	2	2									L															
155-013	Snapper, yellowtail	muscle	43	43	M																							
157-004	Snook	muscle	12	12	M																							
059-021	Sole, Dover	muscle	69	67		M																						
		liver	4	4											L													
059-022	Sole, English	muscle	73	73			M																					
		liver	5	5											L													
059-004	Sole, petrale	muscle	56	55		M																						
		liver	7	7								L																
059-006	Sole, rex	muscle	60	60		M																						
059-014	Sole, rock	muscle	10	9		M																						
011-004	Spearfish, shortbill	muscle	15	15		M																						
		liver	4	4											L													
045-020	Spot	muscle	54	53				M																				
166-003	Sturgeon, green	muscle	10	10			M																					
168-001	Surfperch, barred	muscle	20	20						M																		
200-003	Tarpon	muscle	12	12		M																						
		liver	2	2								L																
185-022	Tautog	muscle	14	14			M																					
174-003	Tilefish	muscle	60	60		M																						
179-028	Trout, cutthroat	muscle	3	3		M																						
179-029	Trout, rainbow (steelhead)	muscle	9	9		M																						
		liver	1	1									L															
091-019	Tuna, albacore	muscle	40	40		M																						
		liver	5	5								L																
091-022	Tuna, bigeye	muscle	40	40	M																							
		liver	21	21											L													
091-021	Tuna, blackfin	muscle	1	1		M																						
091-023	Tuna, bluefin	muscle	11	11		M																						
		liver	1	1											L													
091-008	Tuna, skipjack	muscle	70	69		M																						
		liver	8	8									L															
091-020	Tuna, yellowfin	muscle	79	78		M																						
		liver	26	26											L													
091-006	Tunny, little	muscle	50	50		M																						
		liver	2	2											L													
091-001	Wahoo	muscle	18	17		M																						
		liver	3	3							L																	
183-002	Wolffish, Atlantic	muscle	59	59		M																						
		liver	14	14									L															
079-023	Yellowtail	muscle	23	23		M																						
	Mollusca																											
187-005	Abalone, green	shucked	10	10						S																		
187-008	Abalone, red	shucked	10	10			S																					
191-003	Clam, butter	shucked	29	29											S													
191-001	Clam, hard (quahog)	shucked	141	141																S								
191-008	Clam, Pacific littleneck	shucked	1	1									S															
243-002	Clam, razor	shucked	39	39												S												
242-001	Clam, soft	shucked	19	19																S								
244-005	Clam, surf	shucked	23	23											S													
205-001	Octopus (marmuratus)	whole	4	4					W																			
		mantle	35	35			N																					

Table 4.7. Distribution of Mean Manganese Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Manganese Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	150	150														S										
189-002	Oyster, Pacific (giant)	shucked	70	70																	S							
190-014	Scallop, Atlantic bay	adductor muscle	20	20												A												
190-016	Scallop, calico	shucked	10	10													S											
		adductor muscle	20	20				A																				
190-028	Scallop, pink	adductor muscle	5	5		A																						
190-013	Scallop, sea (smooth)	adductor muscle	11	11			A																					
188-003	Squid, Atlantic longfinned	whole	23	23				W																				
		mantle	110	110			N																					
188-006	Squid, Pacific	whole	50	50					W																			
188-014	Squid, shortfinned	mantle	92	92				N																				
	Crustacea																											
196-001	Crab, blue	body meat	34	34											B													
		claw meat	5	5										C														
		claw & body meat	54	54											D													
196-011	Crab, dungeness	meat, unk.	42	42							U																	
		claw & body meat	8	8											D													
196-012	Crab, king	meat, unk.	20	20				U																				
		claw & body meat	9	9				D																				
196-006	Crab, red, deep sea	meat, unk.	25	25					U																			
196-003	Crab, rock	meat, unk.	15	15											U													
196-035	Crab, tanner (bairdi)	meat, unk.	50	50				U																				
194-012	Lobster, northern (American)	body meat	2	2							B																	
		claw meat	2	2			C																					
		tail meat	2	2				T																				
		leg meat	2	2					F																			
		claw & tail meat	78	78						K																		
194-002	Lobster, spiny (Atlantic)	tail meat	40	40		T																						
194-003	Lobster, spiny (Pacific)	tail meat	5	5			T																					
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	17				P																				
192-005	Shrimp, brown	tail, peeled	53	53							P																	
192-007	Shrimp, ocean	tail, peeled	10	10			P																					
192-010	Shrimp, pink	tail, peeled	50	50				P																				
192-011	Shrimp, pink (northern)	tail, peeled	64	64				P																				
192-003	Shrimp, royal red	tail, peeled	12	12				P																				
192-004	Shrimp, white	tail, peeled	76	76							P																	

[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.8. Distribution of Mean Mercury Levels in the Resource Survey, by Species.

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Mercury Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
078-005	Alewife	muscle	43	29	M																							
		whole	4	1		W																						
001-016	Anchovy, northern	whole	40	15	W																							
001-006	Anchovy, striped	h & g	40	40	H																							
002-002	Argentine, Atlantic	h & g	7	2	H																							
062-014	Ballyhoo	whole	58	6	W																							
005-002	Barracuda, Atlantic	muscle	7	7												M												
005-001	Barracuda, Pacific	muscle	20	20		M																						
006-006	Bass, black sea	muscle	53	52		M																						
		liver	2	2				L																				
007-004	Bass, striped	muscle	117	107						M																		
		liver	3	3										L														
012-001	Bluefish	muscle	73	72				M																				
		liver	4	4							L																	
091-011	Bonito, Atlantic	muscle	15	15											M													
091-009	Bonito, Pacific	muscle	39	35		M																						
		liver	1	1	L																							
021-007	Bullhead, brown	muscle	4	1	M																							
018-014	Butterfish	muscle	72	26	M																							
		whole	17	8	W																							
		h & g	1	1			H																					
021-010	Catfish, channel	muscle	20	20		M																						
023-002	Catfish, gafftopsail	muscle	34	34						M																		
		liver	3	3											L													
023-001	Catfish, sea	muscle	47	47				M																				
		liver	5	5											L													
021-002	Catfish, white	muscle	1	1		M																						
033-008	Cod, Atlantic	muscle	114	107		M																						
		liver	36	13	L																							
033-007	Cod, Pacific (gray)	muscle	58	58		M																						
		liver	16	7	L																							
045-026	Croaker, Atlantic	muscle	92	61	M																							
033-004	Cusk	muscle	75	75				M																				
		liver	18	12								L																
037-004	Cusk-eel, fawn	muscle	2	2	M																							
145-018	Dogfish, smooth	muscle	95	95											M													
141-007	Dogfish, spiny	muscle	115	115					M																			
		liver	28	13		L																						
041-002	Dolphin	muscle	63	59		M																						
		liver	28	14	L																							
045-019	Drum, banded	muscle	5	3	M																							
045-028	Drum, black	muscle	60	52		M																						
		liver	2	2	L																							
045-030	Drum, red	muscle	72	71		M																						
		liver	3	3		L																						
051-001	Eel, American	muscle	30	30			M																					
047-002	Eel, conger	muscle	1	1	M																							
153-009	Eulachon	whole	33	7	W																							
058-028	Flounder, fourspot	muscle	71	61		M																						
058-024	Flounder, Gulf	muscle	40	35		M																						
		liver	1	1	L																							
058-027	Flounder, southern	muscle	42	36	M																							
		liver	2	1	L																							
058-026	Flounder, summer (fluke)	muscle	42	36		M																						
		liver	2	1		L																						
058-030	Flounder, windowpane (s.dab)	muscle	18	16		M																						
059-030	Flounder, winter	muscle	123	83	M																							
		liver	2	1			L																					
059-005	Flounder, witch	muscle	71	57		M																						
059-016	Flounder, yellowtail	muscle	88	71	M																							
		liver	2	0	L																							
006-040	Gag	muscle	30	30						M																		
066-009	Goatfish	muscle	40	28	M																							
068-001	Goosefish	muscle	81	77		M																						
		liver	10	5	L																							
		h & g	1	1			H																					
006-037	Grouper, black	muscle	33	33								M																
006-017	Grouper, red	muscle	41	41				M																				
006-038	Grouper, yellowmouth	muscle	9	9			M																					
		liver	1	1												L												
073-015	Grunt, bluestriped (yellow)	muscle	16	16							M																	

Table 4.8. Distribution of Mean Mercury Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Mercury Content, ppm2/																							
Species Number	Species	Tissue1/	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
073-014	Grunt, white	muscle	17	17			M																					
033-011	Haddock	muscle	77	69	M																							
		liver	18	1	L																							
		whole	1	1	W																							
033-013	Hake, Pacific	muscle	49	48		M																						
		liver	1	0	L																							
033-020	Hake, red	muscle	65	59	M																							
033-012	Hake, silver (whiting)	muscle	83	60	M																							
		liver	3	0	L																							
033-024	Hake, spotted	muscle	64	45	M																							
033-025	Hake, white	muscle	70	60		M																						
		liver	31	7	L																							
059-011	Halibut, Pacific	muscle	37	34			M																					
		liver	16	8				L																				
143-001	Hammerhead, scalloped	muscle	12	12												M												
143-005	Hammerhead, smooth	muscle	10	10												M												
		liver	7	7												L												
018-011	Harvestfish	muscle	3	3	M																							
		whole	16	1		W																						
078-011	Herring, Atlantic	muscle	24	5	M																							
		whole	63	19	W																							
		headed	6	1	E																							
		h & g	2	2		H																						
078-001	Herring, blueback	whole	1	0	W																							
078-012	Herring, Pacific	muscle	14	14	M																							
		whole	30	1			W																					
078-015	Herring, round	h & g	50	12	H																							
006-013	Hind, speckled	muscle	20	20		M																						
		liver	7	7										L														
079-068	Jack, (mackerel scad)	muscle	38	19	M																							
079-053	Jack, akule	muscle	39	37		M																						
079-005	Jack, crevalle	muscle	49	49							M																	
		liver	4	4											L													
079-069	Jack, crevalle (Hawaii)	muscle	39	39				M																				
149-004	Jacksmelt	whole	20	16	W																							
006-016	Jewfish	muscle	8	8			M																					
045-024	Kingfish, northern	muscle	5	2	M																							
045-021	Kingfish, southern	muscle	14	12	M																							
		liver	1	1	L																							
200-002	Ladyfish	muscle	2	2											M													
071-005	Lingcod	muscle	78	78			M																					
		liver	13	11						L																		
091-013	Mackerel, Atlantic	muscle	80	45	M																							
091-012	Mackerel, chub	muscle	30	28	M																							
079-034	Mackerel, jack	muscle	10	10				M																				
		liver	1	1									L															
		headed	4	1	E																							
091-014	Mackerel, king	muscle	107	107				M																				
		liver	10	10												L												
		milt	1	1			Q																					
		roe	11	9		R																						
091-016	Mackerel, Spanish	muscle	109	106				M																				
		liver	4	3			L																					
144-003	Mako, shortfin	muscle	3	3												M												
		liver	2	2											L													
011-002	Marlin, blue	muscle	33	33														M										
		liver	11	11																	L							
011-005	Marlin, striped	muscle	40	30											M													
		liver	9	7		L																						
011-003	Marlin, white	muscle	53	52								M																
		liver	11	11										L														
162-012	Mempachi	muscle	20	20		M																						
		liver	1	1									L															
078-010	Menhaden, Atlantic	muscle	10	2	M																							
		whole	100	27		W																						
078-008	Menhaden, Gulf	muscle	50	15	M																							
		whole	28	19	W																							
		gutted	8	4	G																							
078-009	Menhaden, yellowfin	whole	13	6	W																							
206-001	Milkfish	muscle	40	26	M																							

Table 4.8. Distribution of Mean Mercury Levels in the Resource Survey, by Species (continued)

Species Number	Species Finfish	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Mercury Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
094-010	Mojarra, yellowfin	muscle	10	6	M																							
098-003	Mullet, silver (white)	muscle	36	8	M																							
098-002	Mullet, striped	muscle	156	36	M																							
		liver	5	5	L																							
079-030	Palometa	muscle	2	2				M																				
131-023	Perch, ocean (Pacific)	muscle	30	21	M																							
		liver	17	5	L																							
131-052	Perch, ocean (redfish)	muscle	80	77		M																						
		liver	2	2			L																					
006-010	Perch, sand	muscle	1	1							M																	
168-005	Perch, shiner	whole	2	0	W																							
045-003	Perch, silver	muscle	20	20	M																							
007-001	Perch, white	muscle	27	27		M																						
		h & g	18	16	H																							
079-029	Permit	muscle	9	9		M																						
073-017	Pigfish	muscle	34	32		M																						
114-013	Pinfish, spottail	muscle	10	10			M																					
		liver	1	1		L																						
059-008	Plaice, American (dab)	muscle	68	50	M																							
		whole	1	0	W																							
033-017	Pollock	muscle	73	70		M																						
		liver	32	10	L																							
033-019	Pollock, walleye (Alaska)	muscle	47	35		M																						
		liver	3	1	L																							
079-028	Pompano, Florida	muscle	61	56		M																						
		liver	4	3		L																						
114-014	Porgy, red	muscle	22	22						M																		
		liver	1	1					L																			
056-018	Pout, ocean	muscle	34	29		M																						
		liver	3	0	L																							
131-061	Rockfish, bocaccio	muscle	47	47			M																					
		liver	4	3		L																						
131-063	Rockfish, canary	muscle	44	43		M																						
		liver	2	1		L																						
131-031	Rockfish, copper	muscle	10	10			M																					
131-043	Rockfish, yellowtail	muscle	20	20		M																						
079-004	Runner, blue	muscle	55	53			M																					
		liver	4	4				L																				
126-001	Sablefish	muscle	102	99			M																					
		liver	15	15						L																		
011-001	Sailfish	muscle	43	42						M																		
		liver	3	3									L															
179-020	Salmon, chinook, (king)	muscle	108	84	M																							
		liver	22	11	L																							
179-017	Salmon, chum (keta)	muscle	55	30	M																							
		liver	5	3		L																						
179-018	Salmon, coho (silver)	muscle	69	49	M																							
		liver	7	4	L																							
179-016	Salmon, pink	muscle	29	11	M																							
		liver	3	0	L																							
179-019	Salmon, sockeye (red)	muscle	60	27	M																							
		liver	4	2	L																							
079-013	Scad, round	h & g	3	2	H																							
006-041	Scamp	muscle	10	10				M																				
		liver	1	1													L											
132-031	Sculpin, longhorn	muscle	1	1				M																				
114-016	Scup	muscle	72	47	M																							
135-010	Searobin, northern	muscle	77	73		M																						
135-011	Searobin, striped	muscle	10	10	M																							
045-012	Seatrout, gray (weakfish)	muscle	71	70		M																						
		liver	3	3	L																							
		whole	10	6	W																							
045-007	Seatrout, sand	muscle	18	14		M																						
045-010	Seatrout, silver (white)	muscle	43	30	M																							
		liver	1	1	L																							
045-008	Seatrout, spotted (speckled)	muscle	88	87			M																					
		liver	3	3	L																							
078-006	Shad, American	muscle	60	29	M																							
145-025	Shark, Atlantic, sharpnose	muscle	1	1									M															
145-006	Shark, blacktip	muscle	16	16								M																
		liver	4	3			L																					

Table 4.8. Distribution of Mean Mercury Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	Ranges of Mean Mercury Content, ppm[2/]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	14									M															
		liver	9	7		L																						
145-010	Shark, dusky	muscle	4	4											M													
145-009	Shark, sandbar	muscle	13	13											M													
		liver	7	7																L								
144-001	Shark, white	muscle	2	2						M																		
114-001	Sheepshead	muscle	59	56		M																						
		liver	2	2				L																				
150-005	Skate, little	muscle	54	54		M																						
		liver	2	2	L																							
150-012	Skate, winter	muscle	2	2		M																						
		liver	1	0	L																							
155-005	Snapper, blackfin	muscle	13	13			M																					
155-025	Snapper, gray	muscle	39	39				M																				
155-008	Snapper, gray (mangrove)	muscle	28	28			M																					
155-006	Snapper, red	muscle	38	38			M																					
155-024	Snapper, red (ehu)	muscle	40	39						M																		
155-015	Snapper, vermilion	muscle	36	35		M																						
		liver	2	2		L																						
155-013	Snapper, yellowtail	muscle	43	43		M																						
157-004	Snook	muscle	12	12								M																
059-021	Sole, Dover	muscle	70	63		M																						
		liver	4	4			L																					
059-022	Sole, English	muscle	72	71	M																							
		liver	5	5	L																							
059-004	Sole, petrale	muscle	57	48		M																						
		liver	7	2	L																							
059-006	Sole, rex	muscle	61	60		M																						
059-014	Sole, rock	muscle	10	10		M																						
011-004	Spearfish, shortbill	muscle	15	14			M																					
		liver	4	4		L																						
045-020	Spot	muscle	54	29	M																							
166-003	Sturgeon, green	muscle	10	10		M																						
168-001	Surfperch, barred	muscle	20	20	M																							
200-003	Tarpon	muscle	12	12											M													
		liver	2	2																				L				
185-022	Tautog	muscle	14	14			M																					
174-003	Tilefish	muscle	60	60											M													
179-028	Trout, cutthroat	muscle	3	3				M																				
179-029	Trout, rainbow (steelhead)	muscle	9	4	M																							
		liver	1	0	L																							
091-019	Tuna, albacore	muscle	39	39		M																						
		liver	5	5		L																						
091-022	Tuna, bigeye	muscle	39	39				M																				
		liver	21	20				L																				
091-021	Tuna, blackfin	muscle	1	1				M																				
091-023	Tuna, bluefin	muscle	11	11			M																					
		liver	1	1		L																						
091-008	Tuna, skipjack	muscle	70	67		M																						
		liver	8	6		L																						
091-020	Tuna, yellowfin	muscle	80	76		M																						
		liver	26	24			L																					
091-006	Tunny, little	muscle	50	50									M															
		liver	2	2										L														
091-001	Wahoo	muscle	18	18						M																		
		liver	3	2		L																						
183-002	Wolffish, Atlantic	muscle	59	57		M																						
		liver	15	12		L																						
079-023	Yellowtail	muscle	24	24		M																						
	Mollusca																											
187-005	Abalone, green	shucked	10	4	S																							
187-008	Abalone, red	shucked	10	5	S																							
191-003	Clam, butter	shucked	29	14	S																							
191-001	Clam, hard (quahog)	shucked	141	94	S																							
191-008	Clam, Pacific littleneck	shucked	1	0	S																							
243-002	Clam, razor	shucked	39	17	S																							
242-001	Clam, soft	shucked	19	8	S																							
244-005	Clam, surf	shucked	23	13	S																							
205-001	Octopus (marmuratus)	whole	4	3	W																							
		mantle	36	19	N																							

Table 4.8. Distribution of Mean Mercury Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Mercury Content, ppm[2]																				
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																								
189-001	Oyster, eastern	shucked	153	73	S																				
189-002	Oyster, Pacific (giant)	shucked	69	30	S																				
190-014	Scallop, Atlantic bay	adductor muscle	20	12	A																				
190-016	Scallop, calico	shucked	10	4	S																				
		adductor muscle	20	7	A																				
190-028	Scallop, pink	adductor muscle	5	1	A																				
190-013	Scallop, sea (smooth)	adductor muscle	11	4	A																				
188-003	Squid, Atlantic longfinned	whole	23	14	W																				
		mantle	109	51	N																				
188-006	Squid, Pacific	whole	49	27	W																				
188-014	Squid, shortfinned	mantle	92	47	N																				
	Crustacea																								
196-001	Crab, blue	body meat	34	34		B																			
		claw meat	5	5			C																		
		claw & body meat	53	48		D																			
196-011	Crab, dungeness	meat, unk.	42	42		U																			
		claw & body meat	8	8		D																			
196-012	Crab, king	meat, unk.	19	16	U																				
		claw & body meat	9	9		D																			
196-006	Crab, red, deep sea	meat, unk.	25	25		U																			
196-003	Crab, rock	meat, unk.	15	13		U																			
196-035	Crab, tanner (bairdi)	meat, unk.	49	35		U																			
194-012	Lobster, northern (American)	body meat	2	2				B																	
		claw meat	2	2				C																	
		tail meat	2	2											T										
		leg meat	2	2						F															
		claw & tail meat	80	80			K																		
194-002	Lobster, spiny (Atlantic)	tail meat	40	36		T																			
194-003	Lobster, spiny (Pacific)	tail meat	5	5	T																				
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	6		P																			
192-005	Shrimp, brown	tail, peeled	53	30	P																				
192-007	Shrimp, ocean	tail, peeled	10	4		P																			
192-010	Shrimp, pink	tail, peeled	48	23		P																			
192-011	Shrimp, pink (northern)	tail, peeled	63	30	P																				
192-003	Shrimp, royal red	tail, peeled	11	11	P																				
192-004	Shrimp, white	tail, peeled	77	51	P																				

[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.9. Distribution of Mean Molybdenum Levels in the Resource Survey, by Species

Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	Ranges of Mean Molybdenum Content, ppm[2/]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
078-005	Alewife	muscle	43	9		M																						
		whole	4	3				W																				
001-016	Anchovy, northern	whole	39	37						W																		
001-006	Anchovy, striped	h & g	39	33		H																						
002-002	Argentine, Atlantic	h & g	7	3		H																						
062-014	Ballyhoo	whole	58	52				W																				
005-002	Barracuda, Atlantic	muscle	7	0	M																							
005-001	Barracuda, Pacific	muscle	20	3			M																					
006-006	Bass, black sea	muscle	55	11			M																					
		liver	2	2						L																		
007-004	Bass, striped	muscle	117	15			M																					
		liver	3	3			L																					
012-001	Bluefish	muscle	72	18					M																			
		liver	4	4							L																	
091-011	Bonito, Atlantic	muscle	15	0	M																							
091-009	Bonito, Pacific	muscle	40	9					M																			
		liver	1	1				L																				
021-007	Bullhead, brown	muscle	4	0	M																							
018-014	Butterfish	muscle	72	16		M																						
		whole	17	11				W																				
		h & g	1	1			H																					
021-010	Catfish, channel	muscle	20	4						M																		
023-002	Catfish, gafftopsail	muscle	34	13		M																						
		liver	3	2				L																				
023-001	Catfish, sea	muscle	46	10				M																				
		liver	6	5					L																			
021-002	Catfish, white	muscle	1	0	M																							
033-008	Cod, Atlantic	muscle	114	19			M																					
		liver	36	27			L																					
033-007	Cod, Pacific (gray)	muscle	59	12		M																						
		liver	15	14			L																					
045-026	Croaker, Atlantic	muscle	91	22			M																					
033-004	Cusk	muscle	76	9		M																						
		liver	18	4		L																						
037-004	Cusk-eel, fawn	muscle	2	2		M																						
145-018	Dogfish, smooth	muscle	95	11		M																						
141-007	Dogfish, spiny	muscle	114	35		M																						
		liver	29	15			L																					
041-002	Dolphin	muscle	62	24			M																					
		liver	28	22					L																			
045-019	Drum, banded	muscle	5	1		M																						
045-028	Drum, black	muscle	60	15			M																					
		liver	2	2		L																						
045-030	Drum, red	muscle	73	9				M																				
		liver	3	3			L																					
051-001	Eel, American	muscle	30	3		M																						
047-002	Eel, conger	muscle	1	0	M																							
153-009	Eulachon	whole	33	27		W																						
058-028	Flounder, fourspot	muscle	70	3			M																					
058-024	Flounder, Gulf	muscle	41	7			M																					
		liver	1	0	L																							
058-027	Flounder, southern	muscle	42	7			M																					
		liver	2	1				L																				
058-026	Flounder, summer (fluke)	muscle	42	12			M																					
		liver	2	1			L																					
058-030	Flounder, windowpane (s.dab)	muscle	18	2		M																						
059-030	Flounder, winter	muscle	123	17		M																						
		liver	2	2				L																				
059-005	Flounder, witch	muscle	71	7	M																							
059-016	Flounder, yellowtail	muscle	89	21			M																					
		liver	2	1				L																				
006-040	Gag	muscle	30	5			M																					
066-009	Goatfish	muscle	40	7			M																					
068-001	Goosefish	muscle	81	12			M																					
		liver	10	5			L																					
		h & g	1	0	H																							
006-037	Grouper, black	muscle	33	11			M																					
006-017	Grouper, red	muscle	41	6				M																				
006-038	Grouper, yellowmouth	muscle	10	2			M																					
		liver	1	1										L														
073-015	Grunt, bluestriped (yellow)	muscle	16	5		M																						

Table 4.9. Distribution of Mean Molybdenum Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue1/	Total # Samples	# samples in mean	Ranges of Mean Molybdenum Content, ppm2/																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
073-014	Grunt, white	muscle	17	2		M																						
033-011	Haddock	muscle	77	20		M																						
		liver	18	14			L																					
		whole	1	0	W																							
033-013	Hake, Pacific	muscle	48	8			M																					
		liver	1	1			L																					
033-020	Hake, red	muscle	65	16		M																						
033-012	Hake, silver (whiting)	muscle	83	26		M																						
		liver	3	3			L																					
033-024	Hake, spotted	muscle	65	3		M																						
033-025	Hake, white	muscle	70	24			M																					
		liver	70	22			L																					
059-011	Halibut, Pacific	muscle	37	11			M																					
		liver	16	10			L																					
143-001	Hammerhead, scalloped	muscle	12	5		M																						
143-005	Hammerhead, smooth	muscle	10	2	M																							
		liver	7	6						L																		
018-011	Harvestfish	muscle	3	0	M																							
		whole	16	15		W																						
078-011	Herring, Atlantic	muscle	24	7		M																						
		whole	63	56			W																					
		headed	6	4		E																						
		h & g	2	1			H																					
078-001	Herring, blueback	whole	1	0	W																							
078-012	Herring, Pacific	muscle	14	4				M																				
		whole	30	24			W																					
078-015	Herring, round	h & g	50	35			H																					
006-013	Hind, speckled	muscle	20	1	M																							
		liver	7	7			L																					
079-068	Jack, (mackerel scad)	muscle	40	4		M																						
079-053	Jack, akule	muscle	39	9		M																						
079-005	Jack, crevalle	muscle	49	14				M																				
		liver	4	3					L																			
079-069	Jack, crevalle (Hawaii)	muscle	40	6			M																					
149-004	Jacksmelt	whole	20	15			W																					
006-016	Jewfish	muscle	8	4				M																				
045-024	Kingfish, northern	muscle	6	0	M																							
045-021	Kingfish, southern	muscle	14	4			M																					
		liver	1	1		L																						
200-002	Ladyfish	muscle	2	0	M																							
071-005	Lingcod	muscle	78	20		M																						
		liver	13	12					L																			
091-013	Mackerel, Atlantic	muscle	80	15		M																						
091-012	Mackerel, chub	muscle	30	16		M																						
079-034	Mackerel, jack	muscle	10	2			M																					
		liver	1	1				L																				
		headed	4	3		H																						
091-014	Mackerel, king	muscle	107	20			M																					
		liver	10	9			L																					
		milt	1	0	Q																							
		roe	11	0	R																							
091-016	Mackerel, Spanish	muscle	109	33			M																					
		liver	4	4				L																				
144-003	**Mako,** shortfin	muscle	3	1	M																							
		liver	2	1			L																					
011-002	Marlin, blue	muscle	33	5			M																					
		liver	11	8						L																		
011-005	Marlin, striped	muscle	40	2				M																				
		liver	9	7					L																			
011-003	Marlin, white	muscle	54	8				M																				
		liver	10	10				L																				
162-012	Mempachi	muscle	19	6			M																					
		liver	1	1		L																						
078-010	Menhaden, Atlantic	muscle	10	3			M																					
		whole	100	96				W																				
078-008	Menhaden, Gulf	muscle	50	11			M																					
		whole	28	27					W																			
		gutted	9	9				G																				
078-009	Menhaden, yellowfin	whole	13	12				W																				
206-001	Milkfish	muscle	40	4					M																			

Table 4.9. Distribution of Mean Molybdenum Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Molybdenum Content, ppm[2/]																							
Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
094-010	Mojarra, yellowfin	muscle	10	6					M																			
098-003	Mullet, silver (white)	muscle	36	2		M																						
098-002	Mullet, striped	muscle	158	34			M																					
		liver	5	4											L													
079-030	Palometa	muscle	2	0	M																							
131-023	Perch, ocean (Pacific)	muscle	30	6		M																						
		liver	18	15			L																					
131-052	Perch, ocean (redfish)	muscle	80	20			M																					
		liver	2	1					L																			
006-010	Perch, sand	muscle	1	0	M																							
168-005	Perch, shiner	whole	2	2				W																				
045-003	Perch, silver	muscle	20	7			M																					
007-001	Perch, white	muscle	27	8			M																					
		h & g	19	18					H																			
079-029	Permit	muscle	9	2						M																		
073-017	Pigfish	muscle	34	14			M																					
114-013	Pinfish, spottail	muscle	10	4						M																		
		liver	1	1					L																			
059-008	Plaice, American (dab)	muscle	68	9		M																						
		whole	1	1			W																					
033-017	Pollock	muscle	73	13			M																					
		liver	33	22		L																						
033-019	Pollock, walleye (Alaska)	muscle	48	9		M																						
		liver	3	3			L																					
079-028	Pompano, Florida	muscle	60	13			M																					
		liver	4	4						L																		
114-014	Porgy, red	muscle	22	7		M																						
		liver	1	1					L																			
056-018	Pout, ocean	muscle	34	7		M																						
		liver	3	1			L																					
131-061	Rockfish, bocaccio	muscle	48	13		M																						
		liver	4	2		L																						
131-063	Rockfish, canary	muscle	43	17				M																				
		liver	1	0	L																							
131-031	Rockfish, copper	muscle	10	2			M																					
131-043	Rockfish, yellowtail	muscle	20	3			M																					
079-004	Runner, blue	muscle	56	17			M																					
		liver	4	2				L																				
126-001	Sablefish	muscle	103	28				M																				
		liver	14	7		L																						
011-001	Sailfish	muscle	42	4					M																			
		liver	3	3						L																		
179-020	Salmon, chinook, (king)	muscle	110	40			M																					
		liver	22	17				L																				
179-017	Salmon, chum (keta)	muscle	57	17				M																				
		liver	5	4					L																			
179-018	Salmon, coho (silver)	muscle	68	27			M																					
		liver	7	3			L																					
179-016	Salmon, pink	muscle	27	15			M																					
		liver	3	3				L																				
179-019	Salmon, sockeye (red)	muscle	62	21				M																				
		liver	4	4			L																					
079-013	Scad, round	h & g	3	1			H																					
006-041	Scamp	muscle	10	3		M																						
		liver	1	0	L																							
132-031	Sculpin, longhorn	muscle	1	0	M																							
114-016	Scup	muscle	72	21			M																					
135-010	Searobin, northern	muscle	78	13		M																						
135-011	Searobin, striped	muscle	10	0	M																							
045-012	Seatrout, gray (weakfish)	muscle	72	22		M																						
		liver	3	2		L																						
		whole	10	10			W																					
045-007	Seatrout, sand	muscle	18	8		M																						
045-010	Seatrout, silver (white)	muscle	44	8		M																						
		liver	1	1		L																						
045-008	Seatrout, spotted (speckled)	muscle	89	18		M																						
		liver	3	2	L																							
078-006	Shad, American	muscle	60	9		M																						
145-025	Shark, Atlantic, sharpnose	muscle	1	1			M																					
145-006	Shark, blacktip	muscle	16	6			M																					
		liver	4	2			L																					

Table 4.9. Distribution of Mean Molybdenum Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue1/	Total # Samples	# samples in mean	Ranges of Mean Molybdenum Content, ppm2/																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	6		M																						
		liver	9	8					L																			
145-010	Shark, dusky	muscle	4	0	M																							
145-009	Shark, sandbar	muscle	13	5			M																					
		liver	6	5			L																					
144-001	Shark, white	muscle	2	0	M																							
114-001	Sheepshead	muscle	60	11				M																				
		liver	2	2			L																					
150-005	Skate, little	muscle	54	27		M																						
		liver	2	2						L																		
150-012	Skate, winter	muscle	2	1		M																						
		liver	1	1				L																				
155-005	Snapper, blackfin	muscle	13	5		M																						
155-025	Snapper, gray	muscle	40	7			M																					
155-008	Snapper, gray (mangrove)	muscle	28	3					M																			
155-006	Snapper, red	muscle	38	8			M																					
155-024	Snapper, red (ehu)	muscle	40	5			M																					
155-015	Snapper, vermilion	muscle	36	8						M																		
		liver	2	1		L																						
155-013	Snapper, yellowtail	muscle	43	8		M																						
157-004	Snook	muscle	12	5		M																						
059-021	Sole, Dover	muscle	69	13			M																					
		liver	4	4		L																						
059-022	Sole, English	muscle	72	23				M																				
		liver	5	3			L																					
059-004	Sole, petrale	muscle	56	21			M																					
		liver	7	6			L																					
059-006	Sole, rex	muscle	61	10				M																				
059-014	Sole, rock	muscle	10	5			M																					
011-004	Spearfish, shortbill	muscle	15	4		M																						
		liver	4	2			L																					
045-020	Spot	muscle	54	12			M																					
166-003	Sturgeon, green	muscle	10	3					M																			
168-001	Surfperch, barred	muscle	20	11		M																						
200-003	Tarpon	muscle	12	3		M																						
		liver	2	1				L																				
185-022	Tautog	muscle	14	5			M																					
174-003	Tilefish	muscle	60	6	M																							
179-028	Trout, cutthroat	muscle	3	1		M																						
179-029	Trout, rainbow (steelhead)	muscle	9	2		M																						
		liver	1	1				L																				
091-019	Tuna, albacore	muscle	40	11			M																					
		liver	5	5					L																			
091-022	Tuna, bigeye	muscle	40	9				M																				
		liver	21	21					L																			
091-021	Tuna, blackfin	muscle	1	0	M																							
091-023	Tuna, bluefin	muscle	11	3			M																					
		liver	1	1			L																					
091-008	Tuna, skipjack	muscle	70	14			M																					
		liver	8	6				L																				
091-020	Tuna, yellowfin	muscle	80	18			M																					
		liver	26	25					L																			
091-006	Tunny, little	muscle	50	5			M																					
		liver	2	2				L																				
091-001	Wahoo	muscle	18	4				M																				
		liver	3	3					L																			
183-002	Wolffish, Atlantic	muscle	60	10		M																						
		liver	15	12			L																					
079-023	Yellowtail	muscle	24	3					M																			
	Mollusca																											
187-005	Abalone, green	shucked	10	9								S																
187-008	Abalone, red	shucked	9	2					S																			
191-003	Clam, butter	shucked	29	22			S																					
191-001	Clam, hard (quahog)	shucked	137	122				S																				
191-008	Clam, Pacific littleneck	shucked	1	1		S																						
243-002	Clam, razor	shucked	39	19			S																					
242-001	Clam, soft	shucked	19	19			S																					
244-005	Clam, surf	shucked	23	23				S																				
205-001	Octopus (marmuratus)	whole	4	4			W																					
		mantle	36	7						N																		

Table 4.9. Distribution of Mean Molybdenum Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Molybdenum Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	152	100					S																			
189-002	Oyster, Pacific (giant)	shucked	70	41			S																					
190-014	Scallop, Atlantic bay	adductor muscle	20	14			A																					
190-016	Scallop, calico	shucked	10	10					S																			
		adductor muscle	20	13										A														
190-028	Scallop, pink	adductor muscle	5	0	A																							
190-013	Scallop, sea (smooth)	adductor muscle	11	5													A											
188-003	Squid, Atlantic longfinned	whole	23	8		W																						
		mantle	110	25			N																					
188-006	Squid, Pacific	whole	50	22			W																					
188-014	Squid, shortfinned	mantle	92	22		N																						
	Crustacea																											
196-001	Crab, blue	body meat	35	24			B																					
		claw meat	5	1			C																					
		claw & body meat	53	34			D																					
196-011	Crab, dungeness	meat, unk.	42	17			U																					
		claw & body meat	8	5		D																						
196-012	Crab, king	meat, unk.	20	17		U																						
		claw & body meat	9	3		D																						
196-006	Crab, red, deep sea	meat, unk.	25	11			U																					
196-003	Crab, rock	meat, unk.	15	13		U																						
196-035	Crab, tanner (bairdi)	meat, unk.	50	8		U																						
194-012	Lobster, northern (American)	body meat	2	2				B																				
		claw meat	2	0	C																							
		tail meat	2	1			T																					
		leg meat	2	1		F																						
		claw & tail meat	80	43		K																						
194-002	Lobster, spiny (Atlantic)	tail meat	40	17				T																				
194-003	Lobster, spiny (Pacific)	tail meat	5	5		T																						
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	3		P																						
192-005	Shrimp, brown	tail, peeled	53	15			P																					
192-007	Shrimp, ocean	tail, peeled	10	3		P																						
192-010	Shrimp, pink	tail, peeled	50	25		P																						
192-011	Shrimp, pink (northern)	tail, peeled	64	19		P																						
192-003	Shrimp, royal red	tail, peeled	12	6		P																						
192-004	Shrimp, white	tail, peeled	76	27			P																					

[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.10. Distribution of Mean Nickel Levels in the Resource Survey, by Species

Species Number	Species	Tissue1/	Total # Samples	# samples in mean	Ranges of Mean Nickel Content, ppm2/																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
078-005	Alewife	muscle	42	42			M																					
		whole	4	4				W																				
001-016	Anchovy, northern	whole	39	39								W																
001-006	Anchovy, striped	h & g	40	40					H																			
002-002	Argentine, Atlantic	h & g	7	7			H																					
062-014	Ballyhoo	whole	58	58							W																	
005-002	Barracuda, Atlantic	muscle	7	7			M																					
005-001	Barracuda, Pacific	muscle	20	18			M																					
006-006	Bass, black sea	muscle	55	50			M																					
		liver	2	2			L																					
007-004	Bass, striped	muscle	116	108		M																						
		liver	3	3			L																					
012-001	Bluefish	muscle	72	65			M																					
		liver	4	4			L																					
091-011	Bonito, Atlantic	muscle	15	15			M																					
091-009	Bonito, Pacific	muscle	40	40			M																					
		liver	1	1			L																					
021-007	Bullhead, brown	muscle	4	4		M																						
018-014	Butterfish	muscle	71	69			M																					
		whole	17	17					W																			
		h & g	1	1				H																				
021-010	Catfish, channel	muscle	20	20			M																					
023-002	Catfish, gafftopsail	muscle	34	30			M																					
		liver	3	3			L																					
023-001	Catfish, sea	muscle	47	44			M																					
		liver	6	5				L																				
021-002	Catfish, white	muscle	1	1		M																						
033-008	Cod, Atlantic	muscle	114	112			M																					
		liver	36	34			L																					
033-007	Cod, Pacific (gray)	muscle	59	51			M																					
		liver	16	12			L																					
045-026	Croaker, Atlantic	muscle	90	84			M																					
033-004	Cusk	muscle	76	76		M																						
		liver	18	18			L																					
037-004	Cusk-eel, fawn	muscle	2	2								M																
145-018	Dogfish, smooth	muscle	95	94			M																					
141-007	Dogfish, spiny	muscle	115	108		M																						
		liver	28	28		L																						
041-002	Dolphin	muscle	63	59			M																					
		liver	28	28			L																					
045-019	Drum, banded	muscle	5	5			M																					
045-028	Drum, black	muscle	61	59			M																					
		liver	2	2			L																					
045-030	Drum, red	muscle	72	69			M																					
		liver	3	3						L																		
051-001	Eel, American	muscle	30	27			M																					
047-002	Eel, conger	muscle	1	1		M																						
153-009	Eulachon	whole	33	31				W																				
058-028	Flounder, fourspot	muscle	71	71			M																					
058-024	Flounder, Gulf	muscle	41	40		M																						
		liver	1	1						L																		
058-027	Flounder, southern	muscle	42	40			M																					
		liver	2	2		L																						
058-026	Flounder, summer (fluke)	muscle	42	35		M																						
		liver	2	2					L																			
058-030	Flounder, windowpane (s.dab)	muscle	18	17			M																					
059-030	Flounder, winter	muscle	123	123			M																					
		liver	2	2			L																					
059-005	Flounder, witch	muscle	71	71			M																					
059-016	Flounder, yellowtail	muscle	89	89			M																					
		liver	2	2					L																			
006-040	Gag	muscle	29	29		M																						
066-009	Goatfish	muscle	38	37			M																					
068-001	Goosefish	muscle	80	80			M																					
		liver	10	10		L																						
		h & g	1	1				H																				
006-037	Grouper, black	muscle	34	32			M																					
006-017	Grouper, red	muscle	41	41			M																					
006-038	Grouper, yellowmouth	muscle	10	8		M																						
		liver	1	1			L																					
073-015	Grunt, bluestriped (yellow)	muscle	16	16			M																					

Table 4.10. Distribution of Mean Nickel Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	Ranges of Mean Nickel Content, ppm[2/]																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
073-014	Grunt, white	muscle	17	17			M																					
033-011	Haddock	muscle	77	77			M																					
		liver	18	18					L																			
		whole	1	1			W																					
033-013	Hake, Pacific	muscle	49	43			M																					
		liver	1	1		L																						
033-020	Hake, red	muscle	65	65			M																					
033-012	Hake, silver (whiting)	muscle	83	82			M																					
		liver	3	3		L																						
033-024	Hake, spotted	muscle	64	63			M																					
033-025	Hake, white	muscle	70	70			M																					
		liver	30	30		L																						
059-011	Halibut, Pacific	muscle	37	35			M																					
		liver	15	15		L																						
143-001	Hammerhead, scalloped	muscle	12	12				M																				
143-005	Hammerhead, smooth	muscle	9	8		M																						
		liver	7	6						L																		
018-011	Harvestfish	muscle	3	3			M																					
		whole	16	16					W																			
078-011	Herring, Atlantic	muscle	24	24			M																					
		whole	63	63				W																				
		headed	6	6				E																				
		h & g	2	2				H																				
078-001	Herring, blueback	whole	1	1			W																					
078-012	Herring, Pacific	muscle	14	14			M																					
		whole	30	30				W																				
078-015	Herring, round	h & g	50	50				H																				
006-013	Hind, speckled	muscle	19	19		M																						
		liver	7	7		L																						
079-068	Jack, (mackerel scad)	muscle	40	39			M																					
079-053	Jack, akule	muscle	38	36			M																					
079-005	Jack, crevalle	muscle	49	42			M																					
		liver	4	4									L															
079-069	Jack, crevalle (Hawaii)	muscle	40	40			M																					
149-004	Jacksmelt	whole	20	20				W																				
006-016	Jewfish	muscle	8	8		M																						
045-024	Kingfish, northern	muscle	6	6		M																						
045-021	Kingfish, southern	muscle	14	14			M																					
		liver	1	1			L																					
200-002	Ladyfish	muscle	2	2							M																	
071-005	Lingcod	muscle	76	70			M																					
		liver	12	12			L																					
091-013	Mackerel, Atlantic	muscle	80	80			M																					
091-012	Mackerel, chub	muscle	30	30		M																						
079-034	Mackerel, jack	muscle	10	10		M																						
		liver	1	1			L																					
		headed	4	4			E																					
091-014	Mackerel, king	muscle	105	101			M																					
		liver	10	10			L																					
		milt	1	1					Q																			
		roe	11	11			R																					
091-016	Mackerel, Spanish	muscle	109	99			M																					
		liver	4	4			L																					
144-003	Mako, shortfin	muscle	3	3			M																					
		liver	2	2		L																						
011-002	Marlin, blue	muscle	33	31			M																					
		liver	11	10												L												
011-005	Marlin, striped	muscle	40	37		M																						
		liver	9	8			L																					
011-003	Marlin, white	muscle	54	52		M																						
		liver	10	10				L																				
162-012	Mempachi	muscle	19	16			M																					
		liver	1	1				L																				
078-010	Menhaden, Atlantic	muscle	9	9				M																				
		whole	101	101									W															
078-008	Menhaden, Gulf	muscle	50-	50			M																					
		whole	28	28										W														
		gutted	9	9											G													
078-009	Menhaden, yellowfin	whole	13	13						W																		
206-001	Milkfish	muscle	40	39		M																						

Table 4.10. Distribution of Mean Nickel Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue1/	Total # Samples	# samples in mean	Ranges of Mean Nickel Content, ppm2/																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
094-010	Mojarra, yellowfin	muscle	10	9			M																					
098-003	Mullet, silver (white)	muscle	36	36		M																						
098-002	Mullet, striped	muscle	158	147			M																					
		liver	5	5			L																					
079-030	Palometa	muscle	2	0	M																							
131-023	Perch, ocean (Pacific)	muscle	30	23				M																				
		liver	18	16			L																					
131-052	Perch, ocean (redfish)	muscle	80	80			M																					
		liver	2	2							L																	
006-010	Perch, sand	muscle	1	0	M																							
168-005	Perch, shiner	whole	2	2						W																		
045-003	Perch, silver	muscle	20	19			M																					
007-001	Perch, white	muscle	27	27			M																					
		h & g	19	19					H																			
079-029	Permit	muscle	9	6			M																					
073-017	Pigfish	muscle	34	33				M																				
114-013	Pinfish, spottail	muscle	9	9			M																					
		liver	1	1				L																				
059-008	Plaice, American (dab)	muscle	66	66			M																					
		whole	1	1						W																		
033-017	Pollock	muscle	72	72			M																					
		liver	30	27		L																						
033-019	Pollock, walleye (Alaska)	muscle	47	46			M																					
		liver	3	3		L																						
079-028	Pompano, Florida	muscle	59	59		M																						
		liver	4	4							L																	
114-014	Porgy, red	muscle	22	21			M																					
		liver	1	1					L																			
056-018	Pout, ocean	muscle	34	34			M																					
		liver	3	3			L																					
131-061	Rockfish, bocaccio	muscle	48	43			M																					
		liver	4	4		L																						
131-063	Rockfish, canary	muscle	43	33			M																					
		liver	1	1		L																						
131-031	Rockfish, copper	muscle	10	10			M																					
131-043	Rockfish, yellowtail	muscle	20	16			M																					
079-004	Runner, blue	muscle	56	55			M																					
		liver	4	4				L																				
126-001	Sablefish	muscle	103	89			M																					
		liver	14	11				L																				
011-001	Sailfish	muscle	41	38		M																						
		liver	3	3			L																					
179-020	Salmon, chinook, (king)	muscle	107	104		M																						
		liver	22	22		L																						
179-017	Salmon, chum (keta)	muscle	57	56			M																					
		liver	5	5		L																						
179-018	Salmon, coho (silver)	muscle	68	65		M																						
		liver	7	7		L																						
179-016	Salmon, pink	muscle	27	24			M																					
		liver	3	3		L																						
179-019	Salmon, sockeye (red)	muscle	62	58			M																					
		liver	4	4		L																						
079-013	Scad, round	h & g	3	3						H																		
006-041	Scamp	muscle	10	10		M																						
		liver	1	1			L																					
132-031	Sculpin, longhorn	muscle	1	1										M														
114-016	Scup	muscle	72	71			M																					
135-010	Searobin, northern	muscle	77	77			M																					
135-011	Searobin, striped	muscle	10	10			M																					
045-012	Seatrout, gray (weakfish)	muscle	72	71			M																					
		liver	3	3				L																				
		whole	10	10				W																				
045-007	Seatrout, sand	muscle	18	17			M																					
045-010	Seatrout, silver (white)	muscle	44	44		M																						
		liver	1	1						L																		
045-008	Seatrout, spotted (speckled)	muscle	89	75			M																					
		liver	3.	3			L																					
078-006	Shad, American	muscle	60	59			M																					
145-025	Shark, Atlantic, sharpnose	muscle	1	1												M												
145-006	Shark, blacktip	muscle	16	16			M																					
		liver	4	4			L																					

Table 4.10. Distribution of Mean Nickel Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	14			M																					
		liver	8	8			L																					
145-010	Shark, dusky	muscle	4	4			M																					
145-009	Shark, sandbar	muscle	13	13			M																					
		liver	7	6			L																					
144-001	Shark, white	muscle	2	2			M																					
114-001	Sheepshead	muscle	59	56			M																					
		liver	2	2						L																		
150-005	Skate, little	muscle	54	54					M																			
		liver	2	2				L																				
150-012	Skate, winter	muscle	2	2			M																					
		liver	1	1									L															
155-005	Snapper, blackfin	muscle	13	13			M																					
155-025	Snapper, gray	muscle	39	39		M																						
155-008	Snapper, gray (mangrove)	muscle	28	25			M																					
155-006	Snapper, red	muscle	38	34			M																					
155-024	Snapper, red (ehu)	muscle	40	40		M																						
155-015	Snapper, vermilion	muscle	36	31			M																					
		liver	2	2											L													
155-013	Snapper, yellowtail	muscle	42	42			M																					
157-004	Snook	muscle	12	12		M																						
059-021	Sole, Dover	muscle	69	61			M																					
		liver	4	4						L																		
059-022	Sole, English	muscle	72	66			M																					
		liver	5	4						L																		
059-004	Sole, petrale	muscle	57	53			M																					
		liver	7	6			L																					
059-006	Sole, rex	muscle	61	49				M																				
059-014	Sole, rock	muscle	10	10			M																					
011-004	Spearfish, shortbill	muscle	15	15			M																					
		liver	4	4			L																					
045-020	Spot	muscle	54	47			M																					
166-003	Sturgeon, green	muscle	10	9			M																					
168-001	Surfperch, barred	muscle	20	20			M																					
200-003	Tarpon	muscle	12	12			M																					
		liver	2	1												L												
185-022	Tautog	muscle	12	12		M																						
174-003	Tilefish	muscle	60	60			M																					
179-028	Trout, cutthroat	muscle	3	3		M																						
179-029	Trout, rainbow (steelhead)	muscle	9	9		M																						
		liver	1	1		L																						
091-019	Tuna, albacore	muscle	39	38		M																						
		liver	5	5		L																						
091-022	Tuna, bigeye	muscle	40	36		M																						
		liver	21	20		L																						
091-021	Tuna, blackfin	muscle	1	1		M																						
091-023	Tuna, bluefin	muscle	11	10			M																					
		liver	1	1		L																						
091-008	Tuna, skipjack	muscle	69	65			M																					
		liver	8	8			L																					
091-020	Tuna, yellowfin	muscle	79	77			M																					
		liver	26	25			L																					
091-006	Tunny, little	muscle	49	49		M																						
		liver	2	2					L																			
091-001	Wahoo	muscle	18	17			M																					
		liver	3	3			L																					
183-002	Wolffish, Atlantic	muscle	60	59			M																					
		liver	15	15					L																			
079-023	Yellowtail	muscle	23	23			M																					
	Mollusca																											
187-005	Abalone, green	shucked	10	10												S												
187-008	Abalone, red	shucked	10	9											S													
191-003	Clam, butter	shucked	29	27								S																
191-001	Clam, hard (quahog)	shucked	140	140											S													
191-008	Clam, Pacific littleneck	shucked	1	1								S																
243-002	Clam, razor	shucked	39	37					S																			
242-001	Clam, soft	shucked	19	19						S																		
244-005	Clam, surf	shucked	23	23						S																		
205-001	Octopus (marmuratus)	whole	4	4					W																			
		mantle	36	36				N																				

Ranges of Mean Nickel Content, ppm[2]

Table 4.10. Distribution of Mean Nickel Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Nickel Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	151	148						S																		
189-002	Oyster, Pacific (giant)	shucked	69	64				S																				
190-014	Scallop, Atlantic bay	adductor muscle	20	20			A																					
190-016	Scallop, calico	shucked	10	10											S													
		adductor muscle	20	19			A																					
190-028	Scallop, pink	adductor muscle	5	5			A																					
190-013	Scallop, sea (smooth)	adductor muscle	11	11			A																					
188-003	Squid, Atlantic longfinned	whole	23	23				W																				
		mantle	110	110			N																					
188-006	Squid, Pacific	whole	50	48			W																					
188-014	Squid, shortfinned	mantle	92	92				N																				
	Crustacea																											
196-001	Crab, blue	body meat	34	34				B																				
		claw meat	5	5					C																			
		claw & body meat	53	53					D																			
196-011	Crab, dungeness	meat, unk.	42	40						U																		
		claw & body meat	7	6				D																				
196-012	Crab, king	meat, unk.	20	20				U																				
		claw & body meat	9	9				D																				
196-006	Crab, red, deep sea	meat, unk.	24	24						U																		
196-003	Crab, rock	meat, unk.	15	15									U															
196-035	Crab, tanner (bairdi)	meat, unk.	50	50			U																					
194-012	Lobster, northern (American)	body meat	2	2					B																			
		claw meat	2	2			C																					
		tail meat	2	2				T																				
		leg meat	2	2						F																		
		claw & tail meat	80	80				K																				
194-002	Lobster, spiny (Atlantic)	tail meat	40	39				T																				
194-003	Lobster, spiny (Pacific)	tail meat	5	5				T																				
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	17			P																					
192-005	Shrimp, brown	tail, peeled	52	48				P																				
192-007	Shrimp, ocean	tail, peeled	10	10			P																					
192-010	Shrimp, pink	tail, peeled	49	48				P																				
192-011	Shrimp, pink (northern)	tail, peeled	64	64				P																				
192-003	Shrimp, royal red	tail, peeled	12	12				P																				
192-004	Shrimp, white	tail, peeled	77	70			P																					

[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.11. Distribution of Mean Selenium Levels in the Resource Survey, by Species

					Ranges of Mean Selenium Content, ppm[2]																							
Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
078-005	Alewife	muscle	40	40					M																			
		whole	4	4								W																
001-016	Anchovy, northern	whole	37	37						W																		
001-006	Anchovy, striped	h & g	40	40						H																		
002-002	Argentine, Atlantic	h & g	6	6					H																			
062-014	Ballyhoo	whole	57	57								W																
005-002	Barracuda, Atlantic	muscle	7	7							M																	
005-001	Barracuda, Pacific	muscle	20	20					M																			
006-006	Bass, black sea	muscle	54	54						M																		
		liver	2	2											L													
007-004	Bass, striped	muscle	113	113						M																		
		liver	3	3											L													
012-001	Bluefish	muscle	71	71										M														
		liver	4	4												L												
091-011	Bonito, Atlantic	muscle	14	14											M													
091-009	Bonito, Pacific	muscle	39	39						M																		
		liver	–	–																								
021-007	Bullhead, brown	muscle	4	4		M																						
018-014	Butterfish	muscle	71	71						M																		
		whole	17	17								W																
		h & g	1	1								H																
021-010	Catfish, channel	muscle	20	20				M																				
023-002	Catfish, gafftopsail	muscle	33	33			M																					
		liver	3	3													L											
023-001	Catfish, sea	muscle	45	43					M																			
		liver	6	5												L												
021-002	Catfish, white	muscle	1	1		M																						
033-008	Cod, Atlantic	muscle	112	112					M																			
		liver	31	31										L														
033-007	Cod, Pacific (gray)	muscle	53	52					M																			
		liver	10	10											L													
045-026	Croaker, Atlantic	muscle	90	89								M																
033-004	Cusk	muscle	73	73						M																		
		liver	14	14												L												
037-004	Cusk-eel, fawn	muscle	1	1						M																		
145-018	Dogfish, smooth	muscle	93	92								M																
141-007	Dogfish, spiny	muscle	112	109					M																			
		liver	29	29							L																	
041-002	Dolphin	muscle	61	61							M																	
		liver	13	13											L													
045-019	Drum, banded	muscle	5	5						M																		
045-028	Drum, black	muscle	60	60								M																
		liver	2	2											L													
045-030	Drum, red	muscle	72	72							M																	
		liver	2	2												L												
051-001	Eel, American	muscle	30	30					M																			
047-002	Eel, conger	muscle	1	1							M																	
153-009	Eulachon	whole	33	33					W																			
058-028	Flounder, fourspot	muscle	70	70						M																		
058-024	Flounder, Gulf	muscle	37	37									M															
		liver	1	1									L															
058-027	Flounder, southern	muscle	42	42										M														
		liver	1	1							L																	
058-026	Flounder, summer (fluke)	muscle	40	40								M																
		liver	1	1											L													
058-030	Flounder, windowpane (s.dab)	muscle	18	18							M																	
059-030	Flounder, winter	muscle	122	122						M																		
		liver	1	1												L												
059-005	Flounder, witch	muscle	68	68											M													
059-016	Flounder, yellowtail	muscle	88	88							M																	
		liver	1	1												L												
006-040	Gag	muscle	29	29										M														
066-009	Goatfish	muscle	39	39					M																			
068-001	Goosefish	muscle	80	80							M																	
		liver	9	9											L													
		h & g	1	1					H																			
006-037	Grouper, black	muscle	33	33										M														
006-017	Grouper, red	muscle	40	40								M																
006-038	Grouper, yellowmouth	muscle	10	10								M																
		liver	1	1											L													
073-015	Grunt, bluestriped (yellow)	muscle	16	16					M																			

Table 4.11. Distribution of Mean Selenium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	Ranges of Mean Selenium Content, ppm[2/] < 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
073-014	Grunt, white	muscle	17	17					M																			
033-011	Haddock	muscle	76	76						M																		
		liver	13	13											L													
		whole	1	1											W													
033-013	Hake, Pacific	muscle	47	47						M																		
		liver	1	1											L													
033-020	Hake, red	muscle	62	62					M																			
033-012	Hake, silver (whiting)	muscle	81	80						M																		
		liver	3	3										L														
033-024	Hake, spotted	muscle	65	65				M																				
033-025	Hake, white	muscle	69	68						M																		
		liver	24	24								L																
059-011	Halibut, Pacific	muscle	34	34									M															
		liver	12	12											L													
143-001	Hammerhead, scalloped	muscle	12	12									M															
143-005	Hammerhead, smooth	muscle	9	9											M													
		liver	7	7																				L				
018-011	Harvestfish	muscle	3	3									M															
		whole	16	16											W													
078-011	Herring, Atlantic	muscle	24	23						M																		
		whole	62	62									W															
		headed	6	6								E																
		h & g	2	2							H																	
078-001	Herring, blueback	whole	1	1							W																	
078-012	Herring, Pacific	muscle	14	14						M																		
		whole	30	30									W															
078-015	Herring, round	h & g	50	50											H													
006-013	Hind, speckled	muscle	20	20										M														
		liver	5	5														L										
079-068	Jack, (mackerel scad)	muscle	39	39											M													
079-053	Jack, akule	muscle	37	37									M															
079-005	Jack, crevalle	muscle	47	47								M																
		liver	3	3																	L							
079-069	Jack, crevalle (Hawaii)	muscle	40	39				M																				
149-004	Jacksmelt	whole	19	19						W																		
006-016	Jewfish	muscle	7	7					M																			
045-024	Kingfish, northern	muscle	6	6							M																	
045-021	Kingfish, southern	muscle	14	14											M													
		liver	1	1											L													
200-002	Ladyfish	muscle	1	1										M														
071-005	Lingcod	muscle	72	72						M																		
		liver	8	8											L													
091-013	Mackerel, Atlantic	muscle	80	80							M																	
091-012	Mackerel, chub	muscle	30	30							M																	
079-034	Mackerel, jack	muscle	10	10									M															
		liver	1	1																		L						
		headed	4	4						E																		
091-014	Mackerel, king	muscle	104	104									M															
		liver	7	7															L									
		milt	1	1									Q															
		roe	10	10												R												
091-016	Mackerel, Spanish	muscle	106	106								M																
		liver	4	4											L													
144-003	**Mako**, shortfin	muscle	3	3											M													
		liver	2	2											L													
011-002	Marlin, blue	muscle	31	31											M													
		liver	9	9																		L						
011-005	Marlin, striped	muscle	40	40											M													
		liver	8	8												L												
011-003	Marlin, white	muscle	51	51									M															
		liver	6	5															L									
162-012	Mempachi	muscle	20	20							M																	
		liver	1	1																				L				
078-010	Menhaden, Atlantic	muscle	10	10								M																
		whole	98	98											W													
078-008	Menhaden, Gulf	muscle	49	49							M																	
		whole	28	28									W															
		gutted	7	7							G																	
078-009	Menhaden, yellowfin	whole	12	12											W													
206-001	Milkfish	muscle	40	40						M																		

Table 4.11. Distribution of Mean Selenium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue$^{1/}$	Total # Samples	# samples in mean	Ranges of Mean Selenium Content, ppm$^{2/}$																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
094-010	Mojarra, yellowfin	muscle	10	10					M																			
098-003	Mullet, silver (white)	muscle	36	36				M																				
098-002	Mullet, striped	muscle	153	148				M																				
		liver	4	4												L												
079-030	Palometa	muscle	2	2							M																	
131-023	Perch, ocean (Pacific)	muscle	27	27										M														
		liver	16	16												L												
131-052	Perch, ocean (redfish)	muscle	80	80									M															
		liver	1	1									L															
006-010	Perch, sand	muscle	1	1						M																		
168-005	Perch, shiner	whole	2	2						W																		
045-003	Perch, silver	muscle	17	17						M																		
007-001	Perch, white	muscle	26	26								M																
		h & g	18	18											H													
079-029	Permit	muscle	9	9							M																	
073-017	Pigfish	muscle	33	33						M																		
114-013	Pinfish, spottail	muscle	10	10								M																
		liver	-	-																								
059-008	Plaice, American (dab)	muscle	67	67						M																		
		whole	1	1				W																				
033-017	Pollock	muscle	72	72						M																		
		liver	27	27										L														
033-019	Pollock, walleye (Alaska)	muscle	48	47				M																				
		liver	3	3									L															
079-028	Pompano, Florida	muscle	61	61							M																	
		liver	4	4											L													
114-014	Porgy, red	muscle	22	22						M																		
		liver	1	1												L												
056-018	Pout, ocean	muscle	32	32							M																	
		liver	2	2											L													
131-061	Rockfish, bocaccio	muscle	45	45							M																	
		liver	2	2											L													
131-063	Rockfish, canary	muscle	41	41									M															
		liver	1	1											L													
131-031	Rockfish, copper	muscle	9	9								M																
131-043	Rockfish, yellowtail	muscle	20	20										M														
079-004	Runner, blue	muscle	55	55									M															
		liver	3	3												L												
126-001	Sablefish	muscle	98	96					M																			
		liver	9	9											L													
011-001	Sailfish	muscle	43	43									M															
		liver	2	2											L													
179-020	Salmon, chinook, (king)	muscle	104	103					M																			
		liver	18	18											L													
179-017	Salmon, chum (keta)	muscle	52	52					M																			
		liver	5	5													L											
179-018	Salmon, coho (silver)	muscle	68	66					M																			
		liver	7	7											L													
179-016	Salmon, pink	muscle	29	28					M																			
		liver	3	3											L													
179-019	Salmon, sockeye (red)	muscle	58	58					M																			
		liver	4	4																L								
079-013	Scad, round	h & g	2	2									H															
006-041	Scamp	muscle	10	10							M																	
		liver	1	1													L											
132-031	Sculpin, longhorn	muscle	1	1											M													
114-016	Scup	muscle	72	72							M																	
135-010	Searobin, northern	muscle	77	77					M																			
135-011	Searobin, striped	muscle	10	10						M																		
045-012	Seatrout, gray (weakfish)	muscle	71	71						M																		
		liver	2	2											L													
		whole	10	10								W																
045-007	Seatrout, sand	muscle	18	18								M																
045-010	Seatrout, silver (white)	muscle	43	43								M																
		liver	1	1											L													
045-008	Seatrout, spotted (speckled)	muscle	87	87							M																	
		liver	.3	3											L													
078-006	Shad, American	muscle	59	59					M																			
145-025	Shark, Atlantic, sharpnose	muscle	1	1											M													
145-006	Shark, blacktip	muscle	16	16										M														
		liver	4	4																			L					

Table 4.11. Distribution of Mean Selenium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	12	12				M																				
		liver	7	7											L													
145-010	Shark, dusky	muscle	3	3											M													
145-009	Shark, sandbar	muscle	11	11								M																
		liver	7	7												L												
144-001	Shark, white	muscle	1	1							M																	
114-001	Sheepshead	muscle	59	59							M																	
		liver	2	2											L													
150-005	Skate, little	muscle	52	52							M																	
		liver	2	2											L													
150-012	Skate, winter	muscle	2	2						M																		
		liver	1	1											L													
155-005	Snapper, blackfin	muscle	11	11								M																
155-025	Snapper, gray	muscle	40	40									M															
155-008	Snapper, gray (mangrove)	muscle	26	26					M																			
155-006	Snapper, red	muscle	33	33								M																
155-024	Snapper, red (ehu)	muscle	39	39								M																
155-015	Snapper, vermilion	muscle	35	34										M														
		liver	2	2												L												
155-013	Snapper, yellowtail	muscle	42	42									M															
157-004	Snook	muscle	12	12							M																	
059-021	Sole, Dover	muscle	65	65											M													
		liver	3	3												L												
059-022	Sole, English	muscle	70	70									M															
		liver	5	5												L												
059-004	Sole, petrale	muscle	53	53							M																	
		liver	6	6											L													
059-006	Sole, rex	muscle	57	57											M													
059-014	Sole, rock	muscle	9	8											M													
011-004	Spearfish, shortbill	muscle	15	15								M																
		liver	4	4													L											
045-020	Spot	muscle	53	53							M																	
166-003	Sturgeon, green	muscle	10	10							M																	
168-001	Surfperch, barred	muscle	20	20					M																			
200-003	Tarpon	muscle	12	12						M																		
		liver	2	2													L											
185-022	Tautog	muscle	14	14						M																		
174-003	Tilefish	muscle	59	59											M													
179-028	Trout, cutthroat	muscle	2	2			M																					
179-029	Trout, rainbow (steelhead)	muscle	9	9				M																				
		liver	–	–																								
091-019	Tuna, albacore	muscle	40	40											M													
		liver	5	5																				L				
091-022	Tuna, bigeye	muscle	35	35											M													
		liver	16	16																					L			
091-021	Tuna, blackfin	muscle	1	1									M															
091-023	Tuna, bluefin	muscle	11	11											M													
		liver	1	1												L												
091-008	Tuna, skipjack	muscle	67	67											M													
		liver	1	1																			L					
091-020	Tuna, yellowfin	muscle	76	76											M													
		liver	21	21																				L				
091-006	Tunny, little	muscle	48	48											M													
		liver	2	2													L											
091-001	Wahoo	muscle	18	18											M													
		liver	2	2													L											
183-002	Wolffish, Atlantic	muscle	60	59									M															
		liver	14	14												L												
079-023	Yellowtail	muscle	24	24						M																		
	Mollusca																											
187-005	Abalone, green	shucked	10	9		S																						
187-008	Abalone, red	shucked	9	7				S																				
191-003	Clam, butter	shucked	28	28					S																			
191-001	Clam, hard (quahog)	shucked	136	136					S																			
191-008	Clam, Pacific littleneck	shucked	1	1					S																			
243-002	Clam, razor	shucked	38	38					S																			
242-001	Clam, soft	shucked	19	19									S															
244-005	Clam, surf	shucked	23	23				S																				
205-001	Octopus (marmuratus)	whole	4	4								W																
		mantle	36	36					N																			

Ranges of Mean Selenium Content, ppm[2]

Table 4.11. Distribution of Mean Selenium Levels in the Resources Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Selenium Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	145	144								S																
189-002	Oyster, Pacific (giant)	shucked	69	69								S																
190-014	Scallop, Atlantic bay	adductor muscle	19	19				A																				
190-016	Scallop, calico	shucked	10	9				S																				
		adductor muscle	20	20					A																			
190-028	Scallop, pink	adductor muscle	5	5			A																					
190-013	Scallop, sea (smooth)	adductor muscle	11	11				A																				
188-003	Squid, Atlantic longfinned	whole	22	22									W															
		mantle	109	109						N																		
188-006	Squid, Pacific	whole	50	50						W																		
188-014	Squid, shortfinned	mantle	90	90						N																		
	Crustacea																											
196-001	Crab, blue	body meat	30	30							B																	
		claw meat	5	5								C																
		claw & body meat	50	50								D																
196-011	Crab, dungeness	meat, unk.	38	38						U																		
		claw & body meat	7	7										D														
196-012	Crab, king	meat, unk.	20	20				U																				
		claw & body meat	9	9					D																			
196-006	Crab, red, deep sea	meat, unk.	25	25											U													
196-003	Crab, rock	meat, unk.	15	15											U													
196-035	Crab, tanner (bairdi)	meat, unk.	50	50							U																	
194-012	Lobster, northern (American)	body meat	2	2									B															
		claw meat	2	2						C																		
		tail meat	2	2										T														
		leg meat	1	1							F																	
		claw & tail meat	73	73									K															
194-002	Lobster, spiny (Atlantic)	tail meat	38	37			T																					
194-003	Lobster, spiny (Pacific)	tail meat	4	4				T																				
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	17				P																				
192-005	Shrimp, brown	tail, peeled	49	49							P																	
192-007	Shrimp, ocean	tail, peeled	10	10				P																				
192-010	Shrimp, pink	tail, peeled	48	48						P																		
192-011	Shrimp, pink (northern)	tail, peeled	64	64					P																			
192-003	Shrimp, royal red	tail, peeled	12	12								P																
192-004	Shrimp, white	tail, peeled	76	75							P																	

[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.12. Distribution of Mean Silver Levels in the Resource Survey, by Species

					Ranges of Mean Silver Content, ppm[2]																							
Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
078-005	Alewife	muscle	43	40	M																							
		whole	4	4	W																							
001-016	Anchovy, northern	whole	40	39		W																						
001-006	Anchovy, striped	h & g	40	39		H																						
002-002	Argentine, Atlantic	h & g	7	7	H																							
062-014	Ballyhoo	whole	58	58		W																						
005-002	Barracuda, Atlantic	muscle	7	7	M																							
005-001	Barracuda, Pacific	muscle	20	15	M																							
006-006	Bass, black sea	muscle	55	37	M																							
		liver	2	2	L																							
007-004	Bass, striped	muscle	117	82	M																							
		liver	3	3	L																							
012-001	Bluefish	muscle	73	48	M																							
		liver	4	3	L																							
091-011	Bonito, Atlantic	muscle	15	14	M																							
091-009	Bonito, Pacific	muscle	40	33	M																							
		liver	1	1	L																							
021-007	Bullhead, brown	muscle	4	3	M																							
018-014	Butterfish	muscle	71	64	M																							
		whole	17	17	W																							
		h & g	1	1		H																						
021-010	Catfish, channel	muscle	20	10	M																							
023-002	Catfish, gafftopsail	muscle	34	24	M																							
		liver	3	2	L																							
023-001	Catfish, sea	muscle	47	37	M																							
		liver	6	6	L																							
021-002	Catfish, white	muscle	1	1	M																							
033-008	Cod, Atlantic	muscle	114	101	M																							
		liver	36	35		L																						
033-007	Cod, Pacific (gray)	muscle	59	34	M																							
		liver	16	15		L																						
045-026	Croaker, Atlantic	muscle	92	76	M																							
033-004	Cusk	muscle	76	75	M																							
		liver	17	12	L																							
037-004	Cusk-eel, fawn	muscle	2	2	M																							
145-018	Dogfish, smooth	muscle	94	87	M																							
141-007	Dogfish, spiny	muscle	115	85	M																							
		liver	29	24	L																							
041-002	Dolphin	muscle	63	50	M																							
		liver	28	24	L																							
045-019	Drum, banded	muscle	5	4	M																							
045-028	Drum, black	muscle	61	50	M																							
		liver	2	2	L																							
045-030	Drum, red	muscle	73	51	M																							
		liver	3	3	L																							
051-001	Eel, American	muscle	30	26	M																							
047-002	Eel, conger	muscle	1	1	M																							
153-009	Eulachon	whole	33	27	W																							
058-028	Flounder, fourspot	muscle	71	66	M																							
058-024	Flounder, Gulf	muscle	41	33	M																							
		liver	1	1	L																							
058-027	Flounder, southern	muscle	42	36	M																							
		liver	2	2	L																							
058-026	Flounder, summer (fluke)	muscle	42	29	M																							
		liver	2	2	L																							
058-030	Flounder, windowpane (s.dab)	muscle	18	16	M																							
059-030	Flounder, winter	muscle	122	109	M																							
		liver	2	2	L																							
059-005	Flounder, witch	muscle	71	48	M																							
059-016	Flounder, yellowtail	muscle	89	75	M																							
		liver	2	0	L																							
006-040	Gag	muscle	30	25	M																							
066-009	Goatfish	muscle	40	39	M																							
068-001	Goosefish	muscle	81	74	M																							
		liver	10	7	L																							
		h & g	1	1	H																							
006-037	Grouper, black	muscle	34	28	M																							
006-017	Grouper, red	muscle	41	38	M																							
006-038	Grouper, yellowmouth	muscle	10	5	M																							
		liver	1	1	L																							
073-015	Grunt, bluestriped (yellow)	muscle	16	16	M																							

Table 4.12. Distribution of Mean Silver Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Silver Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
073-014	Grunt, white	muscle	17	16	M																							
033-011	Haddock	muscle	77	67	M																							
		liver	18	16	L																							
		whole	1	0	W																							
033-013	Hake, Pacific	muscle	49	28	M																							
		liver	1	1	L																							
033-020	Hake, red	muscle	65	62	M																							
033-012	Hake, silver (whiting)	muscle	83	75	M																							
		liver	3	2	L																							
033-024	Hake, spotted	muscle	65	64	M																							
033-025	Hake, white	muscle	70	59	M																							
		liver	31	21	L																							
059-011	Halibut, Pacific	muscle	37	25	M																							
		liver	16	11	L																							
143-001	Hammerhead, scalloped	muscle	12	12	M																							
143-005	Hammerhead, smooth	muscle	10	7	M																							
		liver	7	3	L																							
018-011	Harvestfish	muscle	3	1	M																							
		whole	16	16	W																							
078-011	Herring, Atlantic	muscle	24	24	M																							
		whole	63	63	W																							
		headed	6	6	E																							
		h & g	2	2	H																							
078-001	Herring, blueback	whole	1	1	W																							
078-012	Herring, Pacific	muscle	14	8	M																							
		whole	30	29	W																							
078-015	Herring, round	h & g	50	50	H																							
006-013	Hind, speckled	muscle	20	15	M																							
		liver	7	7	L																							
079-068	Jack, (mackerel scad)	muscle	40	36	M																							
079-053	Jack. akule	muscle	38	28	M																							
079-005	Jack, crevalle	muscle	48	32	M																							
		liver	4	4	L																							
079-069	Jack, crevalle (Hawaii)	muscle	40	38	M																							
149-004	Jacksmelt	whole	20	20	W																							
006-016	Jewfish	muscle	8	6	M																							
045-024	Kingfish, northern	muscle	6	5	M																							
045-021	Kingfish, southern	muscle	14	12	M																							
		liver	1	1	L																							
200-002	Ladyfish	muscle	2	1	M																							
071-005	Lingcod	muscle	78	57	M																							
		liver	12	12	L																							
091-013	Mackerel, Atlantic	muscle	80	77	M																							
091-012	Mackerel, chub	muscle	30	30	M																							
079-034	Mackerel, jack	muscle	10	7	M																							
		liver	1	1	L																							
		headed	4	4		H																						
091-014	Mackerel, king	muscle	107	79	M																							
		liver	10	8	L																							
		milt	1	1	Q																							
		roe	11	11	R																							
091-016	Mackerel, Spanish	muscle	109	77	M																							
		liver	4	3	L																							
144-003	**Mako**, shortfin	muscle	3	3	M																							
		liver	2	2	L																							
011-002	Marlin, blue	muscle	33	21	M																							
		liver	11	10	L																							
011-005	Marlin, striped	muscle	40	36	M																							
		liver	9	9	L																							
011-003	Marlin, white	muscle	54	36	M																							
		liver	10	8	L																							
162-012	Mempachi	muscle	20	13	M																							
		liver	1	1	L																							
078-010	Menhaden, Atlantic	muscle	10	10	M																							
		whole	101	101		W																						
078-008	Menhaden, Gulf	muscle	50	45	M																							
		whole	28	27		W																						
		gutted	9	9			G																					
078-009	Menhaden, yellowfin	whole	13	13		W																						
206-001	Milkfish	muscle	40	24	M																							

Table 4.12. Distribution of Mean Silver Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	Ranges of Mean Silver Content, ppm[2/]																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
094-010	Mojarra, yellowfin	muscle	10	8	M																							
098-003	Mullet, silver (white)	muscle	36	34	M																							
098-002	Mullet, striped	muscle	158	136	M																							
		liver	4	4					L																			
079-030	Palometa	muscle	2	0	M																							
131-023	Perch, ocean (Pacific)	muscle	30	16	M																							
		liver	18	7	L																							
131-052	Perch, ocean (redfish)	muscle	80	65	M																							
		liver	2	1			L																					
006-010	Perch, sand	muscle	1	1		M																						
168-005	Perch, shiner	whole	2	2		W																						
045-003	Perch, silver	muscle	20	16	M																							
007-001	Perch, white	muscle	27	26	M																							
		h & g	19	19		H																						
079-029	Permit	muscle	9	7	M																							
073-017	Pigfish	muscle	34	29	M																							
114-013	Pinfish, spottail	muscle	10	10	M																							
		liver	1	1	L																							
059-008	Plaice, American (dab)	muscle	67	52	M																							
		whole	1	1	W																							
033-017	Pollock	muscle	73	62	M																							
		liver	33	16	L																							
033-019	Pollock, walleye (Alaska)	muscle	48	42	M																							
		liver	3	3	L																							
079-028	Pompano, Florida	muscle	60	52	M																							
		liver	4	4		L																						
114-014	Porgy, red	muscle	22	19	M																							
		liver	1	1	L																							
056-018	Pout, ocean	muscle	34	33	M																							
		liver	3	3	L																							
131-061	Rockfish, bocaccio	muscle	48	31	M																							
		liver	4	3	L																							
131-063	Rockfish, canary	muscle	44	22	M																							
		liver	1	0	L																							
131-031	Rockfish, copper	muscle	10	10	M																							
131-043	Rockfish, yellowtail	muscle	20	5	M																							
079-004	Runner, blue	muscle	56	48	M																							
		liver	4	3	L																							
126-001	Sablefish	muscle	103	61	M																							
		liver	14	10	L																							
011-001	Sailfish	muscle	42	33	M																							
		liver	3	3	L																							
179-020	Salmon, chinook, (king)	muscle	110	94	M																							
		liver	22	18	L																							
179-017	Salmon, chum (keta)	muscle	57	44	M																							
		liver	5	5				L																				
179-018	Salmon, coho (silver)	muscle	68	54	M																							
		liver	7	6	L																							
179-016	Salmon, pink	muscle	27	23	M																							
		liver	3	2	L																							
179-019	Salmon, sockeye (red)	muscle	62	42	M																							
		liver	4	4			L																					
079-013	Scad, round	h & g	3	3	H																							
006-041	Scamp	muscle	10	10	M																							
		liver	1	1		L																						
132-031	Sculpin, longhorn	muscle	1	1	M																							
114-016	Scup	muscle	72	63	M																							
135-010	Searobin, northern	muscle	77	75	M																							
135-011	Searobin, striped	muscle	10	10	M																							
045-012	Seatrout, gray (weakfish)	muscle	72	59	M																							
		liver	3	3	L																							
		whole	10	10		W																						
045-007	Seatrout, sand	muscle	18	14	M																							
045-010	Seatrout, silver (white)	muscle	44	34	M																							
		liver	1	1	L																							
045-008	Seatrout, spotted (speckled)	muscle	89	64	M																							
		liver	3	2	L																							
078-006	Shad, American	muscle	60	55	M																							
145-025	Shark, Atlantic, sharpnose	muscle	1	1	M																							
145-006	Shark, blacktip	muscle	16	15	M																							
		liver	4	3	L																							

Table 4.12. Distribution of Silver Levels in the Resource Survey, by Species (continued)

					Ranges of Mean Silver Content, ppm[2/]																							
Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	13	M																							
		liver	9	7	L																							
145-010	Shark, dusky	muscle	4	3	M																							
145-009	Shark, sandbar	muscle	13	11	M																							
		liver	7	4	L																							
144-001	Shark, white	muscle	2	2	M																							
114-001	Sheepshead	muscle	60	53	M																							
		liver	2	2		L																						
150-005	Skate, little	muscle	54	54	M																							
		liver	2	2	L																							
150-012	Skate, winter	muscle	2	1	M																							
		liver	1	1		L																						
155-005	Snapper, blackfin	muscle	13	12	M																							
155-025	Snapper, gray	muscle	40	38	M																							
155-008	Snapper, gray (mangrove)	muscle	28	25	M																							
155-006	Snapper, red	muscle	38	28	M																							
155-024	Snapper, red (ehu)	muscle	40	36	M																							
155-015	Snapper, vermilion	muscle	36	22	M																							
		liver	2	2	L																							
155-013	Snapper, yellowtail	muscle	43	40	M																							
157-004	Snook	muscle	12	12	M																							
059-021	Sole, Dover	muscle	70	39	M																							
		liver	4	3	L																							
059-022	Sole, English	muscle	73	46	M																							
		liver	5	5		L																						
059-004	Sole, petrale	muscle	57	38	M																							
		liver	7	3	L																							
059-006	Sole, rex	muscle	61	33	M																							
059-014	Sole, rock	muscle	10	10	M																							
011-004	Spearfish, shortbill	muscle	15	14	M																							
		liver	4	4	L																							
045-020	Spot	muscle	54	40	M																							
166-003	Sturgeon, green	muscle	10	7	M																							
168-001	Surfperch, barred	muscle	20	20	M																							
200-003	Tarpon	muscle	12	9	M																							
		liver	2	2				L																				
185-022	Tautog	muscle	14	14	M																							
174-003	Tilefish	muscle	60	45	M																							
179-028	Trout, cutthroat	muscle	3	3	M																							
179-029	Trout, rainbow (steelhead)	muscle	9	9	M																							
		liver	1	1						L																		
091-019	Tuna, albacore	muscle	40	29	M																							
		liver	5	4		L																						
091-022	Tuna, bigeye	muscle	40	29	M																							
		liver	21	19	L																							
091-021	Tuna, blackfin	muscle	1	1	M																							
091-023	Tuna, bluefin	muscle	11	8	M																							
		liver	1	1			L																					
091-008	Tuna, skipjack	muscle	69	55	M																							
		liver	8	6	L																							
091-020	Tuna, yellowfin	muscle	80	65	M																							
		liver	26	25	L																							
091-006	Tunny, little	muscle	50	43	M																							
		liver	2	2			L																					
091-001	Wahoo	muscle	18	14	M																							
		liver	3	3	L																							
183-002	Wolffish, Atlantic	muscle	60	56	M																							
		liver	15	15		L																						
079-023	Yellowtail	muscle	23	21	M																							
	Mollusca																											
187-005	Abalone, green	shucked	10	10							S																	
187-008	Abalone, red	shucked	10	9		S																						
191-003	Clam, butter	shucked	29	29				S																				
191-001	Clam, hard (quahog)	shucked	140	140			S																					
191-008	Clam, Pacific littleneck	shucked	1	1		S																						
243-002	Clam, razor	shucked	39	31	S																							
242-001	Clam, soft	shucked	19	19	S																							
244-005	Clam, surf	shucked	23	23	S																							
205-001	Octopus (marmuratus)	whole	4	4				W																				
		mantle	36	36		N																						

Table 4.12 Distribution of Silver Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Silver Content, ppm[2] < 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	151	150				S																				
189-002	Oyster, Pacific (giant)	shucked	70	68			S																					
190-014	Scallop, Atlantic bay	adductor muscle	20	20	A																							
190-016	Scallop, calico	shucked	10	9		S																						
		adductor muscle	20	14	A																							
190-028	Scallop, pink	adductor muscle	5	5	A																							
190-013	Scallop, sea (smooth)	adductor muscle	11	11	A																							
188-003	Squid, Atlantic longfinned	whole	23	23		W																						
		mantle	110	109	N																							
188-006	Squid, Pacific	whole	50	50	W																							
188-014	Squid, shortfinned	mantle	92	92	N																							
	Crustacea																											
196-001	Crab, blue	body meat	35	35		B																						
		claw meat	5	5		C																						
		claw & body meat	54	54				D																				
196-011	Crab, dungeness	meat, unk.	42	40		U																						
		claw & body meat	7	7					D																			
196-012	Crab, king	meat, unk.	20	20	U																							
		claw & body meat	9	9	D																							
196-006	Crab, red, deep sea	meat, unk.	24	24		U																						
196-003	Crab, rock	meat, unk.	15	15				U																				
196-035	Crab, tanner (bairdi)	meat, unk.	50	46		U																						
194-012	Lobster, northern (American)	body meat	2	2		B																						
		claw meat	2	2								C																
		tail meat	2	2			T																					
		leg meat	2	2									F															
		claw & tail meat	80	80					K																			
194-002	Lobster, spiny (Atlantic)	tail meat	40	32	T																							
194-003	Lobster, spiny (Pacific)	tail meat	5	5	T																							
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	17	P																							
192-005	Shrimp, brown	tail, peeled	53	44	P																							
192-007	Shrimp, ocean	tail, peeled	10	9		P																						
192-010	Shrimp, pink	tail, peeled	50	44	P																							
192-011	Shrimp, pink (northern)	tail, peeled	64	64		P																						
192-003	Shrimp, royal red	tail, peeled	12	12	P																							
192-004	Shrimp, white	tail, peeled	77	61	P																							

1/ The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

2/ Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.13. Distribution of Mean Tin Levels in the Resource Survey, by Species

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Tin Content, ppm[2]																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
078-005	Alewife	muscle	42	42							M																	
		whole	4	4											W													
001-016	Anchovy, northern	whole	39	39											W													
001-006	Anchovy, striped	h & g	40	40										H														
002-002	Argentine, Atlantic	h & g	7	7											H													
062-014	Ballyhoo	whole	57	57											W													
005-002	Barracuda, Atlantic	muscle	7	7						M																		
005-001	Barracuda, Pacific	muscle	19	19									M															
006-006	Bass, black sea	muscle	54	54						M																		
		liver	2	2										L														
007-004	Bass, striped	muscle	114	114					M																			
		liver	3	3							L																	
012-001	Bluefish	muscle	73	73						M																		
		liver	4	4											L													
091-011	Bonito, Atlantic	muscle	15	15						M																		
091-009	Bonito, Pacific	muscle	39	39							M																	
		liver	1	1											L													
021-007	Bullhead, brown	muscle	4	4				M																				
018-014	Butterfish	muscle	71	71							M																	
		whole	17	17									W															
		h & g	1	1										H														
021-010	Catfish, channel	muscle	20	20						M																		
023-002	Catfish, gafftopsail	muscle	33	33						M																		
		liver	3	3							L																	
023-001	Catfish, sea	muscle	45	45						M																		
		liver	6	6				L																				
021-002	Catfish, white	muscle	1	1			M																					
033-008	Cod, Atlantic	muscle	111	110						M																		
		liver	35	33				L																				
033-007	Cod, Pacific (gray)	muscle	55	55						M																		
		liver	16	15				L																				
045-026	Croaker, Atlantic	muscle	87	87						M																		
033-004	Cusk	muscle	74	74					M																			
		liver	18	16			L																					
037-004	Cusk-eel, fawn	muscle	2	2											M													
145-018	Dogfish, smooth	muscle	90	90						M																		
141-007	Dogfish, spiny	muscle	109	109									M															
		liver	28	24				L																				
041-002	Dolphin	muscle	60	60					M																			
		liver	26	26						L																		
045-019	Drum, banded	muscle	5	5							M																	
045-028	Drum, black	muscle	60	60						M																		
		liver	2	2						L																		
045-030	Drum, red	muscle	69	69						M																		
		liver	3	3						L																		
051-001	Eel, American	muscle	28	28						M																		
047-002	Eel, conger	muscle	1	1				M																				
153-009	Eulachon	whole	33	33											W													
058-028	Flounder, fourspot	muscle	69	69						M																		
058-024	Flounder, Gulf	muscle	41	41					M																			
		liver	1	1				L																				
058-027	Flounder, southern	muscle	42	42						M																		
		liver	2	2								L																
058-026	Flounder, summer (fluke)	muscle	42	42					M																			
		liver	2	2						L																		
058-030	Flounder, windowpane (s.dab)	muscle	17	17					M																			
059-030	Flounder, winter	muscle	123	123						M																		
		liver	2	2			L																					
059-005	Flounder, witch	muscle	71	68				M																				
059-016	Flounder, yellowtail	muscle	88	88						M																		
		liver	2	2					L																			
006-040	Gag	muscle	30	30					M																			
066-009	Goatfish	muscle	38	38						M																		
068-001	Goosefish	muscle	78	77						M																		
		liver	9	8				L																				
		h & g	1	1					H																			
006-037	Grouper, black	muscle	33	33						M																		
006-017	Grouper, red	muscle	40	40						M																		
006-038	Grouper, yellowmouth	muscle	9	9										M														
		liver	1	0	L																							
073-015	Grunt, bluestriped (yellow)	muscle	16	16						M																		

Table 4.13. Distribution of Mean Tin Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	Ranges of Mean Tin Content, ppm[2/]																							
	Finfish				< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
073-014	Grunt, white	muscle	17	17							M																	
033-011	Haddock	muscle	76	76					M																			
		liver	17	16				L																				
		whole	1	1				W																				
033-013	Hake, Pacific	muscle	47	47						M																		
		liver	1	1				L																				
033-020	Hake, red	muscle	65	65						M																		
033-012	Hake, silver (whiting)	muscle	82	81						M																		
		liver	3	3				L																				
033-024	Hake, spotted	muscle	63	63						M																		
033-025	Hake, white	muscle	70	70					M																			
		liver	31	26			L																					
059-011	Halibut, Pacific	muscle	36	36							M																	
		liver	14	14					L																			
143-001	Hammerhead, scalloped	muscle	12	12						M																		
143-005	Hammerhead, smooth	muscle	9	9					M																			
		liver	6	6			L																					
018-011	Harvestfish	muscle	3	3					M																			
		whole	16	16											W													
078-011	Herring, Atlantic	muscle	23	23							M																	
		whole	63	63											W													
		headed	6	6											E													
		h & g	2	2											H													
078-001	Herring, blueback	whole	1	1						W																		
078-012	Herring, Pacific	muscle	14	14								M																
		whole	30	30												W												
078-015	Herring, round	h & g	50	50											H													
006-013	Hind, speckled	muscle	18	17					M																			
		liver	7	7				L																				
079-068	Jack, (mackerel scad)	muscle	38	38						M																		
079-053	Jack, akule	muscle	38	38					M																			
079-005	Jack, crevalle	muscle	47	47						M																		
		liver	4	4				L																				
079-069	Jack, crevalle (Hawaii)	muscle	36	36							M																	
149-004	Jacksmelt	whole	19	19																		W						
006-016	Jewfish	muscle	8	8					M																			
045-024	Kingfish, northern	muscle	5	5						M																		
045-021	Kingfish, southern	muscle	13	13						M																		
		liver	1	1							L																	
200-002	Ladyfish	muscle	2	2			M																					
071-005	Lingcod	muscle	75	75						M																		
		liver	11	11						L																		
091-013	Mackerel, Atlantic	muscle	79	79						M																		
091-012	Mackerel, chub	muscle	28	28						M																		
079-034	Mackerel, jack	muscle	10	10					M																			
		liver	1	1			L																					
		headed	3	3											H													
091-014	Mackerel, king	muscle	103	103						M																		
		liver	10	10						L																		
		milt	1	1										Q														
		roe	11	11						R																		
091-016	Mackerel, Spanish	muscle	107	107						M																		
		liver	4	4						L																		
144-003	**Mako**, shortfin	muscle	3	3						M																		
		liver	2	2				L																				
011-002	Marlin, blue	muscle	32	30					M																			
		liver	9	9							L																	
011-005	Marlin, striped	muscle	39	39						M																		
		liver	8	8							L																	
011-003	Marlin, white	muscle	49	49					M																			
		liver	8	8									L															
162-012	Mempachi	muscle	17	17						M																		
		liver	1	1					L																			
078-010	Menhaden, Atlantic	muscle	10	10						M																		
		whole	100	100											W													
078-008	Menhaden, Gulf	muscle	49	49								M																
		whole	27	27											W													
		gutted	9	9											G													
078-009	Menhaden, yellowfin	whole	13	13											W													
206-001	Milkfish	muscle	38	38								M																

Table 4.13. Distribution of Mean Tin Levels in the Resource Survey, by Species (continued)

Species Number	Species Finfish	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Tin Content, ppm[2]																						
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
094-010	Mojarra, yellowfin	muscle	10	10							M																			
098-003	Mullet, silver (white)	muscle	35	35							M																			
098-002	Mullet, striped	muscle	152	152							M																			
		liver	5	5										L																
079-030	Palometa	muscle	2	2					M																					
131-023	Perch, ocean (Pacific)	muscle	30	30							M																			
		liver	15	15					L																					
131-052	Perch, ocean (redfish)	muscle	80	80						M																				
		liver	2	2								L																		
006-010	Perch, sand	muscle	1	1						M																				
168-005	Perch, shiner	whole	2	2															W											
045-003	Perch, silver	muscle	20	20								M																		
007-001	Perch, white	muscle	26	26									M																	
		h & g	18	18												H														
079-029	Permit	muscle	9	9						M																				
073-017	Pigfish	muscle	31	31								M																		
114-013	Pinfish, spottail	muscle	10	10								M																		
		liver	1	1							L																			
059-008	Plaice, American (dab)	muscle	67	66						M																				
		whole	1	1												W														
033-017	Pollock	muscle	72	72							M																			
		liver	33	31 |||| L																						
033-019	Pollock, walleye (Alaska)	muscle	46	46									M																	
		liver	3	3							L																			
079-028	Pompano, Florida	muscle	56	56							M																			
		liver	4	4									L																	
114-014	Porgy, red	muscle	22	22								M																		
		liver	1	1											L															
056-018	Pout, ocean	muscle	33	33							M																			
		liver	3	3											L															
131-061	Rockfish, bocaccio	muscle	48	48									M																	
		liver	4	4							L																			
131-063	Rockfish, canary	muscle	43	43												M														
		liver	1	1					L																					
131-031	Rockfish, copper	muscle	10	10							M																			
131-043	Rockfish, yellowtail	muscle	20	20							M																			
079-004	Runner, blue	muscle	55	54							M																			
		liver	4	4						L																				
126-001	Sablefish	muscle	98	98							M																			
		liver	14	14						L																				
011-001	Sailfish	muscle	38	38						M																				
		liver	1	1									L																	
179-020	Salmon, chinook, (king)	muscle	106	105							M																			
		liver	20	18							L																			
179-017	Salmon, chum (keta)	muscle	55	55									M																	
		liver	5	5							L																			
179-018	Salmon, coho (silver)	muscle	65	65							M																			
		liver	7	7						L																				
179-016	Salmon, pink	muscle	25	25									M																	
		liver	3	3									L																	
179-019	Salmon, sockeye (red)	muscle	60	60								M																		
		liver	4	4								L																		
079-013	Scad, round	h & g	3	3												H														
006-041	Scamp	muscle	10	10						M																				
		liver	1	1 |||| L																						
132-031	Sculpin, longhorn	muscle	1	1					M																					
114-016	Scup	muscle	69	69									M																	
135-010	Searobin, northern	muscle	77	77								M																		
135-011	Searobin, striped	muscle	10	10							M																			
045-012	Seatrout, gray (weakfish)	muscle	72	72							M																			
		liver	3	3					L																					
		whole	10	10												W														
045-007	Seatrout, sand	muscle	18	18								M																		
045-010	Seatrout, silver (white)	muscle	35	35								M																		
		liver	1	1												L														
045-008	Seatrout, spotted (speckled)	muscle	86	86							M																			
		liver	2	2								L																		
078-006	Shad, American	muscle	59	58							M																			
145-025	Shark, Atlantic, sharpnose	muscle	1	1										M																
145-006	Shark, blacktip	muscle	15	14						M																				
		liver	4	4						L																				

Table 4.13. Distribution of Mean Tin Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Tin Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	14							M																	
		liver	9	9			L																					
145-010	Shark, dusky	muscle	4	4				M																				
145-009	Shark, sandbar	muscle	13	13							M																	
		liver	6	6				L																				
144-001	Shark, white	muscle	1	1					M																			
114-001	Sheepshead	muscle	58	58						M																		
		liver	2	2							L																	
150-005	Skate, little	muscle	52	52									M															
		liver	2	2					L																			
150-012	Skate, winter	muscle	2	2								M																
		liver	1	1				L																				
155-005	Snapper, blackfin	muscle	12	12							M																	
155-025	Snapper, gray	muscle	38	38						M																		
155-008	Snapper, gray (mangrove)	muscle	26	26					M																			
155-006	Snapper, red	muscle	38	38						M																		
155-024	Snapper, red (ehu)	muscle	37	37							M																	
155-015	Snapper, vermilion	muscle	34	34						M																		
		liver	2	2									L															
155-013	Snapper, yellowtail	muscle	41	41						M																		
157-004	Snook	muscle	12	12					M																			
059-021	Sole, Dover	muscle	66	66						M																		
		liver	4	4						L																		
059-022	Sole, English	muscle	70	70								M																
		liver	5	5								L																
059-004	Sole, petrale	muscle	56	56						M																		
		liver	7	7				L																				
059-006	Sole, rex	muscle	58	58						M																		
059-014	Sole, rock	muscle	10	10						M																		
011-004	Spearfish, shortbill	muscle	14	14						M																		
		liver	4	4										L														
045-020	Spot	muscle	54	54						M																		
166-003	Sturgeon, green	muscle	10	10					M																			
168-001	Surfperch, barred	muscle	20	20											M													
200-003	Tarpon	muscle	12	12						M																		
		liver	2	2								L																
185-022	Tautog	muscle	14	14						M																		
174-003	Tilefish	muscle	60	60					M																			
179-028	Trout, cutthroat	muscle	3	3					M																			
179-029	Trout, rainbow (steelhead)	muscle	9	9						M																		
		liver	1	1								L																
091-019	Tuna, albacore	muscle	39	39					M																			
		liver	4	4								L																
091-022	Tuna, bigeye	muscle	39	39					M																			
		liver	21	21					L																			
091-021	Tuna, blackfin	muscle	1	1					M																			
091-023	Tuna, bluefin	muscle	11	11							M																	
		liver	1	1							L																	
091-008	Tuna, skipjack	muscle	69	69						M																		
		liver	8	8					L																			
091-020	Tuna, yellowfin	muscle	79	79							M																	
		liver	23	23						L																		
091-006	Tunny, little	muscle	46	46					M																			
		liver	2	2							L																	
091-001	Wahoo	muscle	18	18					M																			
		liver	3	3							L																	
183-002	Wolffish, Atlantic	muscle	58	58						M																		
		liver	14	14					L																			
079-023	Yellowtail	muscle	22	22							M																	
	Mollusca																											
187-005	Abalone, green	shucked	10	10											S													
187-008	Abalone, red	shucked	9	9										S														
191-003	Clam, butter	shucked	28	28									S															
191-001	Clam, hard (quahog)	shucked	138	138							S																	
191-008	Clam, Pacific littleneck	shucked	1	1											S													
243-002	Clam, razor	shucked	37	37											S													
242-001	Clam, soft	shucked	19	19						S																		
244-005	Clam, surf	shucked	23	23					S																			
205-001	Octopus (marmuratus)	whole	3	3									W															
		mantle	34	34									N															

Table 4.13. Distribution of Mean Tin Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Tin Content, ppm[2]																						
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																										
189-001	Oyster, eastern	shucked	149	149						S																	
189-002	Oyster, Pacific (giant)	shucked	70	70								S															
190-014	Scallop, Atlantic bay	adductor muscle	20	20						A																	
190-016	Scallop, calico	shucked	9	9									S														
		adductor muscle	20	20						A																	
190-028	Scallop, pink	adductor muscle	5	5				A																			
190-013	Scallop, sea (smooth)	adductor muscle	10	10					A																		
188-003	Squid, Atlantic longfinned	whole	23	23								W															
		mantle	107	107							N																
188-006	Squid, Pacific	whole	50	50							W																
188-014	Squid, shortfinned	mantle	89	89								N															
	Crustacea																										
196-001	Crab, blue	body meat	33	33									B														
		claw meat	4	4								C															
		claw & body meat	53	53									D														
196-011	Crab, dungeness	meat, unk.	41	41									U														
		claw & body meat	7	7								D															
196-012	Crab, king	meat, unk.	20	20											U												
		claw & body meat	9	9								D															
196-006	Crab, red, deep sea	meat, unk.	25	25								U															
196-003	Crab, rock	meat, unk.	15	15								U															
196-035	Crab, tanner (bairdi)	meat, unk.	43	43							U																
194-012	Lobster, northern (American)	body meat	2	2						B																	
		claw meat	2	2						C																	
		tail meat	2	2								T															
		leg meat	2	2									F														
		claw & tail meat	78	78							K																
194-002	Lobster, spiny (Atlantic)	tail meat	39	39							T																
194-003	Lobster, spiny (Pacific)	tail meat	5	5											T												
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	17										P													
192-005	Shrimp, brown	tail, peeled	50	50							P																
192-007	Shrimp, ocean	tail, peeled	8	8								P															
192-010	Shrimp, pink	tail, peeled	49	49								P															
192-011	Shrimp, pink (northern)	tail, peeled	62	62									P														
192-003	Shrimp, royal red	tail, peeled	12	12									P														
192-004	Shrimp, white	tail, peeled	73	73							P																

[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.14. Distribution of Mean Vanadium Levels in the Resource Survey, by Species

Species Number	Species	Tissue1/	Total # Samples	# samples in mean	Ranges of Mean Vanadium Content, ppm2/ < 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
078-005	Alewife	muscle	43	11			M																					
		whole	4	3					W																			
001-016	Anchovy, northern	whole	40	40								W																
001-006	Anchovy, striped	h & g	40	39					H																			
002-002	Argentine, Atlantic	h & g	7	3				H																				
062-014	Ballyhoo	whole	56	54							W																	
005-002	Barracuda, Atlantic	muscle	7	0	M																							
005-001	Barracuda, Pacific	muscle	20	1	M																							
006-006	Bass, black sea	muscle	55	16			M																					
		liver	2	2											L													
007-004	Bass, striped	muscle	117	13			M																					
		liver	3	2				L																				
012-001	Bluefish	muscle	72	16				M																				
		liver	4	2									L															
091-011	Bonito, Atlantic	muscle	15	0	M																							
091-009	Bonito, Pacific	muscle	40	10					M																			
		liver	1	1	L																							
021-007	Bullhead, brown	muscle	4	0	M																							
018-014	Butterfish	muscle	71	18			M																					
		whole	17	10							W																	
		h & g	1	1								H																
021-010	Catfish, channel	muscle	20	2						M																		
023-002	Catfish, gafftopsail	muscle	34	9				M																				
		liver	3	3											L													
023-001	Catfish, sea	muscle	47	17				M																				
		liver	6	6												L												
021-002	Catfish, white	muscle	1	1			M																					
033-008	Cod, Atlantic	muscle	114	28			M																					
		liver	36	8			L																					
033-007	Cod, Pacific (gray)	muscle	59	9					M																			
		liver	16	1	L																							
045-026	Croaker, Atlantic	muscle	91	23			M																					
033-004	Cusk	muscle	76	11			M																					
		liver	18	14								L																
037-004	Cusk-eel, fawn	muscle	2	2				M																				
145-018	Dogfish, smooth	muscle	95	15			M																					
141-007	Dogfish, spiny	muscle	114	24					M																			
		liver	29	6			L																					
041-002	Dolphin	muscle	62	15					M																			
		liver	28	5			L																					
045-019	Drum, banded	muscle	5	3		M																						
045-028	Drum, black	muscle	61	7				M																				
		liver	2	1			L																					
045-030	Drum, red	muscle	73	16			M																					
		liver	3	3	L																							
051-001	Eel, American	muscle	30	7					M																			
047-002	Eel, conger	muscle	1	1	M																							
153-009	Eulachon	whole	33	19				W																				
058-028	Flounder, fourspot	muscle	70	9			M																					
058-024	Flounder, Gulf	muscle	41	7			M																					
		liver	1	1	L																							
058-027	Flounder, southern	muscle	42	8				M																				
		liver	2	1							L																	
058-026	Flounder, summer (fluke)	muscle	42	11				M																				
		liver	2	1		L																						
058-030	Flounder, windowpane (s.dab)	muscle	18	2						M																		
059-030	Flounder, winter	muscle	123	25			M																					
		liver	2	2											L													
059-005	Flounder, witch	muscle	71	10			M																					
059-016	Flounder, yellowtail	muscle	89	24			M																					
		liver	2	2			L																					
006-040	Gag	muscle	30	8				M																				
066-009	Goatfish	muscle	40	5		M																						
068-001	Goosefish	muscle	81	11					M																			
		liver	10	4				L																				
		h & g	1	1	H																							
006-037	Grouper, black	muscle	34	10					M																			
006-017	Grouper, red	muscle	41	7			M																					
006-038	Grouper, yellowmouth	muscle	10	3				M																				
		liver	1	1							L																	
073-015	Grunt, bluestriped (yellow)	muscle	16	3					M																			

Table 4.14. Distribution of Mean Vanadium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Vanadium Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
073-014	Grunt, white	muscle	17	5			M																					
033-011	Haddock	muscle	77	28			M																					
		liver	18	15											L													
		whole	1	0	W																							
033-013	Hake, Pacific	muscle	47	9					M																			
		liver	1	0	L																							
033-020	Hake, red	muscle	65	17			M																					
033-012	Hake, silver (whiting)	muscle	82	28			M																					
		liver	3	0	L																							
033-024	Hake, spotted	muscle	65	2		M																						
033-025	Hake, white	muscle	70	22			M																					
		liver	31	7			L																					
059-011	Halibut, Pacific	muscle	37	11			M																					
		liver	16	5			L																					
143-001	Hammerhead, scalloped	muscle	12	4							M																	
143-005	Hammerhead, smooth	muscle	10	2							M																	
		liver	7	4					L																			
018-011	Harvestfish	muscle	3	0	M																							
		whole	16	14			W																					
078-011	Herring, Atlantic	muscle	24	7				M																				
		whole	63	56					W																			
		headed	6	4				E																				
		h & g	2	2				H																				
078-001	Herring, blueback	whole	1	1		W																						
078-012	Herring, Pacific	muscle	14	0	M																							
		whole	30	25					W																			
078-015	Herring, round	h & g	50	45					H																			
006-013	Hind, speckled	muscle	20	1				M																				
		liver	7	2			L																					
079-068	Jack, (mackerel scad)	muscle	40	5				M																				
079-053	Jack, akule	muscle	39	11				M																				
079-005	Jack, crevalle	muscle	49	11				M																				
		liver	4	1										L														
079-069	Jack, crevalle (Hawaii)	muscle	40	11			M																					
149-004	Jacksmelt	whole	20	20								W																
006-016	Jewfish	muscle	8	4			M																					
045-024	Kingfish, northern	muscle	6	1				M																				
045-021	Kingfish, southern	muscle	14	2			M																					
		liver	1	0	L																							
200-002	Ladyfish	muscle	2	0	M																							
071-005	Lingcod	muscle	78	18				M																				
		liver	13	7			L																					
091-013	Mackerel, Atlantic	muscle	80	15				M																				
091-012	Mackerel, chub	muscle	30	10					M																			
079-034	Mackerel, jack	muscle	10	4			M																					
		liver	1	1													L											
		headed	4	4		E																						
091-014	Mackerel, king	muscle	107	23			M																					
		liver	10	4			L																					
		milt	1	0	Q																							
		roe	11	2	R																							
091-016	Mackerel, Spanish	muscle	109	28						M																		
		liver	4	1		L																						
144-003	**Mako**, shortfin	muscle	3	1		M																						
		liver	2	0	L																							
011-002	Marlin, blue	muscle	33	6					M																			
		liver	11	4				L																				
011-005	Marlin, striped	muscle	40	3											M													
		liver	9	3								L																
011-003	Marlin, white	muscle	54	7		M																						
		liver	10	7			L																					
162-012	Mempachi	muscle	19	4					M																			
		liver	1	1									L															
078-010	Menhaden, Atlantic	muscle	10	4			M																					
		whole	101	98											W													
078-008	Menhaden, Gulf	muscle	49	38					M																			
		whole	28	27												W												
		gutted	9	9												G												
078-009	Menhaden, yellowfin	whole	13	13											W													
206-001	Milkfish	muscle	40	7			M																					

Table 4.14. Distribution of Mean Vanadium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1/]	Total # Samples	# samples in mean	Ranges of Mean Vanadium Content, ppm[2/]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
094-010	Mojarra, yellowfin	muscle	10	5					M																			
098-003	Mullet, silver (white)	muscle	36	13				M																				
098-002	Mullet, striped	muscle	158	40				M																				
		liver	5	5								L																
079-030	Palometa	muscle	2	0	M																							
131-023	Perch, ocean (Pacific)	muscle	30	3			M																					
		liver	18	10			L																					
131-052	Perch, ocean (redfish)	muscle	80	16			M																					
		liver	2	1			L																					
006-010	Perch, sand	muscle	1	0	M																							
168-005	Perch, shiner	whole	2	2					W																			
045-003	Perch, silver	muscle	20	11				M																				
007-001	Perch, white	muscle	27	9			M																					
		h & g	18	17										H														
079-029	Permit	muscle	9	2				M																				
073-017	Pigfish	muscle	34	12				M																				
114-013	Pinfish, spottail	muscle	10	8			M																					
		liver	1	1					L																			
059-008	Plaice, American (dab)	muscle	68	14				M																				
		whole	1	1								W																
033-017	Pollock	muscle	73	21				M																				
		liver	33	9			L																					
033-019	Pollock, walleye (Alaska)	muscle	48	11				M																				
		liver	3	0	L																							
079-028	Pompano, Florida	muscle	59	18			M																					
		liver	4	2					L																			
114-014	Porgy, red	muscle	22	5		M																						
		liver	1	1															L									
056-018	Pout, ocean	muscle	34	3		M																						
		liver	3	1					L																			
131-061	Rockfish, bocaccio	muscle	48	11			M																					
		liver	4	2						L																		
131-063	Rockfish, canary	muscle	43	14				M																				
		liver	1	1											L													
131-031	Rockfish, copper	muscle	10	2		M																						
131-043	Rockfish, yellowtail	muscle	20	2								M																
079-004	Runner, blue	muscle	56	16			M																					
		liver	4	1							L																	
126-001	Sablefish	muscle	103	24					M																			
		liver	14	4										L														
011-001	Sailfish	muscle	42	7					M																			
		liver	3	0	L																							
179-020	Salmon, chinook, (king)	muscle	110	41				M																				
		liver	22	6				L																				
179-017	Salmon, chum (keta)	muscle	57	22				M																				
		liver	5	4									L															
179-018	Salmon, coho (silver)	muscle	67	23				M																				
		liver	7	3			L																					
179-016	Salmon, pink	muscle	27	10					M																			
		liver	3	1		L																						
179-019	Salmon, sockeye (red)	muscle	61	24				M																				
		liver	4	2					L																			
079-013	Scad, round	h & g	3	3									H															
006-041	Scamp	muscle	10	2						M																		
		liver	1	1											L													
132-031	Sculpin, longhorn	muscle	1	0	M																							
114-016	Scup	muscle	72	26					M																			
135-010	Searobin, northern	muscle	78	25			M																					
135-011	Searobin, striped	muscle	10	3			M																					
045-012	Seatrout, gray (weakfish)	muscle	72	21				M																				
		liver	3	1	L																							
		whole	10	10					W																			
045-007	Seatrout, sand	muscle	18	6			M																					
045-010	Seatrout, silver (white)	muscle	44	7		M																						
		liver	1	0	L																							
045-008	Seatrout, spotted (speckled)	muscle	89	20			M																					
		liver	3	0	L																							
078-006	Shad, American	muscle	60	10			M																					
145-025	Shark, Atlantic, sharpnose	muscle	1	0	M																							
145-006	Shark, blacktip	muscle	16	8				M																				
		liver	4	0	L																							

Table 4.14. Distribution of Mean Vanadium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Vanadium Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Finfish																											
145-023	Shark, blue	muscle	14	2				M																				
		liver	9	4			L																					
145-010	Shark, dusky	muscle	4	0	M																							
145-009	Shark, sandbar	muscle	13	1			M																					
		liver	6	3			L																					
144-001	Shark, white	muscle	2	0	M																							
114-001	Sheepshead	muscle	59	13				M																				
		liver	2	2					L																			
150-005	Skate, little	muscle	54	22				M																				
		liver	2	2				L																				
150-012	Skate, winter	muscle	2	1					M																			
		liver	1	0	L																							
155-005	Snapper, blackfin	muscle	13	5		M																						
155-025	Snapper, gray	muscle	40	4				M																				
155-008	Snapper, gray (mangrove)	muscle	28	4		M																						
155-006	Snapper, red	muscle	38	6			M																					
155-024	Snapper, red (ehu)	muscle	40	7				M																				
155-015	Snapper, vermilion	muscle	36	9			M																					
		liver	2	2							L																	
155-013	Snapper, yellowtail	muscle	43	7			M																					
157-004	Snook	muscle	12	5		M																						
059-021	Sole, Dover	muscle	69	19					M																			
		liver	4	3											L													
059-022	Sole, English	muscle	72	18			M																					
		liver	5	5					L																			
059-004	Sole, petrale	muscle	56	19			M																					
		liver	7	3			L																					
059-006	Sole, rex	muscle	61	16				M																				
059-014	Sole, rock	muscle	10	4			M																					
011-004	Spearfish, shortbill	muscle	15	4				M																				
		liver	4	0	L																							
045-020	Spot	muscle	54	8			M																					
166-003	Sturgeon, green	muscle	10	3			M																					
168-001	Surfperch, barred	muscle	20	15				M																				
200-003	Tarpon	muscle	12	5				M																				
		liver	2	2											L													
185-022	Tautog	muscle	14	3					M																			
174-003	Tilefish	muscle	60	11			M																					
179-028	Trout, cutthroat	muscle	3	0	M																							
179-029	Trout, rainbow (steelhead)	muscle	9	1	M																							
		liver	1	0	L																							
091-019	Tuna, albacore	muscle	40	7			M																					
		liver	5	3				L																				
091-022	Tuna, bigeye	muscle	40	7					M																			
		liver	21	8				L																				
091-021	Tuna, blackfin	muscle	1	0	M																							
091-023	Tuna, bluefin	muscle	11	8			M																					
		liver	1	0	L																							
091-008	Tuna, skipjack	muscle	70	15				M																				
		liver	8	2					L																			
091-020	Tuna, yellowfin	muscle	80	25				M																				
		liver	26	9				L																				
091-006	Tunny, little	muscle	50	4			M																					
		liver	2	2		L																						
091-001	Wahoo	muscle	18	1									M															
		liver	3	1											L													
183-002	Wolffish, Atlantic	muscle	60	14			M																					
		liver	15	15											L													
079-023	Yellowtail	muscle	24	3			M																					
	Mollusca																											
187-005	Abalone, green	shucked	10	8			S																					
187-008	Abalone, red	shucked	9	2					S																			
191-003	Clam, butter	shucked	29	27					S																			
191-001	Clam, hard (quahog)	shucked	138	109					S																			
191-008	Clam, Pacific littleneck	shucked	1	1		S																						
243-002	Clam, razor	shucked	39	37							S																	
242-001	Clam, soft	shucked	19	19					S																			
244-005	Clam, surf	shucked	23	8					S																			
205-001	Octopus (marmuratus)	whole	4	4		W																						
		mantle	36	5						N																		

Table 4.14. Distribution of Mean Vanadium Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Vanadium Content, ppm[2]																							
					< 0.1	0.1 to 0.2	0.2 to 0.3	0.3 to 0.4	0.4 to 0.5	0.5 to 0.6	0.6 to 0.7	0.7 to 0.8	0.8 to 0.9	0.9 to 1.0	1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0
	Mollusca																											
189-001	Oyster, eastern	shucked	152	110								S																
189-002	Oyster, Pacific (giant)	shucked	70	53				S																				
190-014	Scallop, Atlantic bay	adductor muscle	20	8			A																					
190-016	Scallop, calico	shucked	10	9									S															
		adductor muscle	20	8					A																			
190-028	Scallop, pink	adductor muscle	5	0	A																							
190-013	Scallop, sea (smooth)	adductor muscle	11	1											A													
188-003	Squid, Atlantic longfinned	whole	23	8			W																					
		mantle	110	18			N																					
188-006	Squid, Pacific	whole	50	15			W																					
188-014	Squid, shortfinned	mantle	92	31			N																					
	Crustacea																											
196-001	Crab, blue	body meat	35	19				B																				
		claw meat	5	4					C																			
		claw & body meat	53	30					D																			
196-011	Crab, dungeness	meat, unk.	42	18					U																			
		claw & body meat	8	4			D																					
196-012	Crab, king	meat, unk.	20	13					U																			
		claw & body meat	9	3			D																					
196-006	Crab, red, deep sea	meat, unk.	25	14			U																					
196-003	Crab, rock	meat, unk.	15	11				U																				
196-035	Crab, tanner (bairdi)	meat, unk.	50	13				U																				
194-012	Lobster, northern (American)	body meat	2	1					B																			
		claw meat	2	0	C																							
		tail meat	2	1		T																						
		leg meat	2	1		F																						
		claw & tail meat	80	41				K																				
194-002	Lobster, spiny (Atlantic)	tail meat	40	16					T																			
194-003	Lobster, spiny (Pacific)	tail meat	5	2				T																				
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	17	8					P																			
192-005	Shrimp, brown	tail, peeled	52	24				P																				
192-007	Shrimp, ocean	tail, peeled	10	2		P																						
192-010	Shrimp, pink	tail, peeled	50	30					P																			
192-011	Shrimp, pink (northern)	tail, peeled	64	22					P																			
192-003	Shrimp, royal red	tail, peeled	12	7			P																					
192-004	Shrimp, white	tail, peeled	76	28					P																			

[1] The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

[2] Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

Table 4.15. Distribution of Mean Zinc Levels in the Resource Survey, by Species

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Zinc Content, ppm[2]																							
	Finfish				1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0	60.0 to 70.0	70.0 to 80.0	80.0 to 90.0	90.0 to 100.0	100.0 to 200.0	200.0 to 300.0	300.0 to 400.0	400.0 to 500.0	500.0 to 600.0	600.0 to 700.0
078-005	Alewife	muscle	43	43						M																		
		whole	4	4										W														
001-016	Anchovy, northern	whole	40	40											W													
001-006	Anchovy, striped	h & g	40	40										H														
002-002	Argentine, Atlantic	h & g	7	7							H																	
062-014	Ballyhoo	whole	56	56											W													
005-002	Barracuda, Atlantic	muscle	7	7				M																				
005-001	Barracuda, Pacific	muscle	20	20						M																		
006-006	Bass, black sea	muscle	54	54				M																				
		liver	2	2											L													
007-004	Bass, striped	muscle	117	117				M																				
		liver	3	3											L													
012-001	Bluefish	muscle	72	72							M																	
		liver	4	4															L									
091-011	Bonito, Atlantic	muscle	15	15						M																		
091-009	Bonito, Pacific	muscle	40	40						M																		
		liver	1	1											L													
021-007	Bullhead, brown	muscle	4	4						M																		
018-014	Butterfish	muscle	72	72							M																	
		whole	17	17										W														
		h & g	1	1										H														
021-010	Catfish, channel	muscle	19	19					M																			
023-002	Catfish, gafftopsail	muscle	33	33										M														
		liver	3	3																								L
023-001	Catfish, sea	muscle	46	46										M														
		liver	6	6																					L			
021-002	Catfish, white	muscle	1	1							M																	
033-008	Cod, Atlantic	muscle	113	113				M																				
		liver	36	36										L														
033-007	Cod, Pacific (gray)	muscle	59	59				M																				
		liver	16	16										L														
045-026	Croaker, Atlantic	muscle	91	91				M																				
033-004	Cusk	muscle	76	76			M																					
		liver	17	17										L														
037-004	Cusk-eel, fawn	muscle	2	2									M															
145-018	Dogfish, smooth	muscle	94	94				M																				
141-007	Dogfish, spiny	muscle	115	115			M																					
		liver	29	29				L																				
041-002	Dolphin	muscle	63	63				M																				
		liver	26	26											L													
045-019	Drum, banded	muscle	5	5					M																			
045-028	Drum, black	muscle	61	61				M																				
		liver	2	2											L													
045-030	Drum, red	muscle	73	73				M																				
		liver	3	2											L													
051-001	Eel, American	muscle	30	30										M														
047-002	Eel, conger	muscle	1	1						M																		
153-009	Eulachon	whole	33	33										W														
058-028	Flounder, fourspot	muscle	71	71			M																					
058-024	Flounder, Gulf	muscle	40	40			M																					
		liver	1	1																		L						
058-027	Flounder, southern	muscle	41	41			M																					
		liver	2	2																L								
058-026	Flounder, summer (fluke)	muscle	42	42				M																				
		liver	2	2																		L						
058-030	Flounder, windowpane (s.dab)	muscle	18	18					M																			
059-030	Flounder, winter	muscle	122	122				M																				
		liver	2	2											L													
059-005	Flounder, witch	muscle	71	71		M																						
059-016	Flounder, yellowtail	muscle	88	88					M																			
		liver	2	2												L												
006-040	Gag	muscle	29	29				M																				
066-009	Goatfish	muscle	40	40				M																				
068-001	Goosefish	muscle	80	80					M																			
		liver	10	10										L														
		h & g	1	1				H																				
006-037	Grouper, black	muscle	33	33				M																				
006-017	Grouper, red	muscle	40	40				M																				
006-038	Grouper, yellowmouth	muscle	10	10			M																					
		liver	1	1													L											
073-015	Grunt, bluestriped (yellow)	muscle	16	16			M																					

Table 4.15. Distribution of Mean Zinc Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Zinc Content, ppm[2]																							
	Finfish				1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0	60.0 to 70.0	70.0 to 80.0	80.0 to 90.0	90.0 to 100.0	100.0 to 200.0	200.0 to 300.0	300.0 to 400.0	400.0 to 500.0	500.0 to 600.0	600.0 to 700.0
073-014	Grunt, white	muscle	16	16			M																					
033-011	Haddock	muscle	77	77			M																					
		liver	18	18										L														
		whole	1	1		W																						
033-013	Hake, Pacific	muscle	47	47			M																					
		liver	1	1											L													
033-020	Hake, red	muscle	65	65			M																					
033-012	Hake, silver (whiting)	muscle	83	83			M																					
		liver	3	3															L									
033-024	Hake, spotted	muscle	65	65			M																					
033-025	Hake, white	muscle	70	70		M																						
		liver	29	29													L											
059-011	Halibut, Pacific	muscle	36	36			M																					
		liver	16	16											L													
143-001	Hammerhead, scalloped	muscle	12	12				M																				
143-005	Hammerhead, smooth	muscle	10	10				M																				
		liver	7	7										L														
018-011	Harvestfish	muscle	3	3							M																	
		whole	16	16										W														
078-011	Herring, Atlantic	muscle	24	24							M																	
		whole	63	63										W														
		headed	6	6										E														
		h & g	2	2										H														
078-001	Herring, blueback	whole	1	1						W																		
078-012	Herring, Pacific	muscle	14	14					M																			
		whole	29	29										W														
078-015	Herring, round	h & g	50	50										H														
006-013	Hind, speckled	muscle	20	20					M																			
		liver	7	7											L													
079-068	Jack, (mackerel scad)	muscle	40	40								M																
079-053	Jack, akule	muscle	39	39										M														
079-005	Jack, crevalle	muscle	48	48					M																			
		liver	4	4															L									
079-069	Jack, crevalle (Hawaii)	muscle	40	40				M																				
149-004	Jacksmelt	whole	20	20											W													
006-016	Jewfish	muscle	8	8					M																			
045-024	Kingfish, northern	muscle	6	6					M																			
045-021	Kingfish, southern	muscle	14	14				M																				
		liver	1	1											L													
200-002	Ladyfish	muscle	2	2										M														
071-005	Lingcod	muscle	77	77				M																				
		liver	13	13											L													
091-013	Mackerel, Atlantic	muscle	79	79						M																		
091-012	Mackerel, chub	muscle	30	30								M																
079-034	Mackerel, jack	muscle	10	10				M																				
		liver	1	1												L												
		headed	4	4							E																	
091-014	Mackerel, king	muscle	106	106					M																			
		liver	9	9														L										
		milt	1	1										Q														
		roe	10	10															R									
091-016	Mackerel, Spanish	muscle	109	109				M																				
		liver	4	4										L														
144-003	**Mako,** shortfin	muscle	3	3		M																						
		liver	2	2								L																
011-002	Marlin, blue	muscle	33	33						M																		
		liver	11	11																	L							
011-005	Marlin, striped	muscle	40	40					M																			
		liver	9	9														L										
011-003	Marlin, white	muscle	54	54						M																		
		liver	10	10														L										
162-012	Mempachi	muscle	19	19		M																						
		liver	1	1																				L				
078-010	Menhaden, Atlantic	muscle	10	10						M																		
		whole	100	100										W														
078-008	Menhaden, Gulf	muscle	50	50						M																		
		whole	27	27											W													
		gutted	9	9											G													
078-009	Menhaden, yellowfin	whole	13	13										W														
206-001	Milkfish	muscle	39	39								M																

Table 4.15. Distribution of Mean Zinc Levels in the Resource Survey, by Species (continued)

Species Number	Species Finfish	Tissue[1]	Total # Samples	# samples in mean	Ranges of Mean Zinc Content, ppm[2] 1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50;0 to 60.0	60.0 to 70.0	70.0 to 80.0	80.0 to 90.0	90.0 to 100.0	100.0 to 200.0	200.0 to 300.0	300.0 to 400.0	400.0 to 500.0	500.0 to 600.0	600.0 to 700.0
094-010	Mojarra, yellowfin	muscle	10	10					M																			
098-003	Mullet, silver (white)	muscle	35	35							M																	
098-002	Mullet, striped	muscle	156	156					M																			
		liver	5	5														L										
079-030	Palometa	muscle	2	2				M																				
131-023	Perch, ocean (Pacific)	muscle	30	30			M																					
		liver	18	18												L												
131-052	Perch, ocean (redfish)	muscle	80	80			M																					
		liver	2	2											L													
006-010	Perch, sand	muscle	1	1						M																		
168-005	Perch, shiner	whole	2	2											W													
045-003	Perch, silver	muscle	20	20						M																		
007-001	Perch, white	muscle	27	27					M																			
		h & g	19	19										H														
079-029	Permit	muscle	9	9				M																				
073-017	Pigfish	muscle	34	34					M																			
114-013	Pinfish, spottail	muscle	9	9					M																			
		liver	1	1													L											
059-008	Plaice, American (dab)	muscle	68	68			M																					
		whole	1	1										W														
033-017	Pollock	muscle	73	73				M																				
		liver	33	33										L														
033-019	Pollock, walleye (Alaska)	muscle	48	48				M																				
		liver	3	3										L														
079-028	Pompano, Florida	muscle	59	59							M																	
		liver	4	4													L											
114-014	Porgy, red	muscle	22	22			M																					
		liver	1	1												L												
056-018	Pout, ocean	muscle	34	34										M														
		liver	3	3										L														
131-061	Rockfish, bocaccio	muscle	48	48				M																				
		liver	4	4												L												
131-063	Rockfish, canary	muscle	44	44					M																			
		liver	1	1												L												
131-031	Rockfish, copper	muscle	10	10		M																						
131-043	Rockfish, yellowtail	muscle	20	20				M																				
079-004	Runner, blue	muscle	55	55					M																			
		liver	4	4											L													
126-001	Sablefish	muscle	103	103			M																					
		liver	14	14										L														
011-001	Sailfish	muscle	42	42					M																			
		liver	3	3													L											
179-020	Salmon, chinook, (king)	muscle	110	110				M																				
		liver	22	22												L												
179-017	Salmon, chum (keta)	muscle	56	56				M																				
		liver	5	5												L												
179-018	Salmon, coho (silver)	muscle	68	68				M																				
		liver	7	7											L													
179-016	Salmon, pink	muscle	27	27					M																			
		liver	3	3												L												
179-019	Salmon, sockeye (red)	muscle	61	61					M																			
		liver	4	4											L													
079-013	Scad, round	h & g	3	3										H														
006-041	Scamp	muscle	10	10			M																					
		liver	1	1														L										
132-031	Sculpin, longhorn	muscle	1	1				M																				
114-016	Scup	muscle	71	71				M																				
135-010	Searobin, northern	muscle	75	75				M																				
135-011	Searobin, striped	muscle	10	10					M																			
045-012	Seatrout, gray (weakfish)	muscle	71	71				M																				
		liver	3	3											L													
		whole	10	10										W														
045-007	Seatrout, sand	muscle	18	18				M																				
045-010	Seatrout, silver (white)	muscle	44	44			M																					
		liver	1	1												L												
045-008	Seatrout, spotted (speckled)	muscle	88	88				M																				
		liver	3.	3										L														
078-006	Shad, American	muscle	59	59			M																					
145-025	Shark, Atlantic, sharpnose	muscle	1	1			M																					
145-006	Shark, blacktip	muscle	16	16			M																					
		liver	4	4					L																			

Table 4.15. Distribution of Mean Zinc Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue1/	Total # Samples	# samples in mean	Ranges of Mean Zinc Content, ppm2/																						
					1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0	60.0 to 70.0	70.0 to 80.0	80.0 to 90.0	90.0 to 100.0	100.0 to 200.0	200.0 to 300.0	300.0 to 400.0	400.0 to 500.0	500.0 to 600.0	600.0 to 700.0
	Finfish																										
145-023	Shark, blue	muscle	14	14					M																		
		liver	9	9									L														
145-010	Shark, dusky	muscle	4	4				M																			
145-009	Shark, sandbar	muscle	13	13					M																		
		liver	7	7								L															
144-001	Shark, white	muscle	2	2			M																				
114-001	Sheepshead	muscle	59	59		M																					
		liver	2	2																			L				
150-005	Skate, little	muscle	54	54							M																
		liver	2	2									L														
150-012	Skate, winter	muscle	2	2					M																		
		liver	1	1									L														
155-005	Snapper, blackfin	muscle	13	13	M																						
155-025	Snapper, gray	muscle	39	39		M																					
155-008	Snapper, gray (mangrove)	muscle	28	28			M																				
155-006	Snapper, red	muscle	37	37			M																				
155-024	Snapper, red (ehu)	muscle	40	40		M																					
155-015	Snapper, vermilion	muscle	36	36		M																					
		liver	2	2																		L					
155-013	Snapper, yellowtail	muscle	43	43		M																					
157-004	Snook	muscle	12	12			M																				
059-021	Sole, Dover	muscle	68	68		M																					
		liver	4	4										L													
059-022	Sole, English	muscle	73	73			M																				
		liver	5	5											L												
059-004	Sole, petrale	muscle	57	57			M																				
		liver	7	7													L										
059-006	Sole, rex	muscle	60	60		M																					
059-014	Sole, rock	muscle	10	10		M																					
011-004	Spearfish, shortbill	muscle	15	15					M																		
		liver	4	4											L												
045-020	Spot	muscle	52	52				M																			
166-003	Sturgeon, green	muscle	10	10			M																				
168-001	Surfperch, barred	muscle	20	20							M																
200-003	Tarpon	muscle	12	12								M															
		liver	2	2																		L					
185-022	Tautog	muscle	13	13			M																				
174-003	Tilefish	muscle	60	60			M																				
179-028	Trout, cutthroat	muscle	3	3			M																				
179-029	Trout, rainbow (steelhead)	muscle	9	9	M																						
		liver	1	1									L														
091-019	Tuna, albacore	muscle	39	39		M																					
		liver	5	5											L												
091-022	Tuna, bigeye	muscle	40	40		M																					
		liver	21	20												L											
091-021	Tuna, blackfin	muscle	1	1				M																			
091-023	Tuna, bluefin	muscle	10	10					M																		
		liver	1	1										L													
091-008	Tuna, skipjack	muscle	70	70							M																
		liver	8	8												L											
091-020	Tuna, yellowfin	muscle	80	80				M																			
		liver	26	26															L								
091-006	Tunny, little	muscle	50	50					M																		
		liver	2	2																		L					
091-001	Wahoo	muscle	18	18				M																			
		liver	3	3																			L				
183-002	Wolffish, Atlantic	muscle	60	60						M																	
		liver	15	15											L												
079-023	Yellowtail	muscle	23	23				M																			
	Mollusca																										
187-005	Abalone, green	shucked	9	9									S														
187-008	Abalone, red	shucked	10	10						S																	
191-003	Clam, butter	shucked	29	29									S														
191-001	Clam, hard (quahog)	shucked	139	139									S														
191-008	Clam, Pacific littleneck	shucked	1	1				S																			
243-002	Clam, razor	shucked	38	38									S														
242-001	Clam, soft	shucked	19	19									S														
244-005	Clam, surf	shucked	23	23									S														
205-001	Octopus (marmuratus)	whole	4	4									W														
		mantle	35	35									N														

Table 4.15. Distribution of Mean Zinc Levels in the Resource Survey, by Species (continued)

Species Number	Species	Tissue1/	Total # Samples	# samples in mean	Ranges of Mean Zinc Content, ppm2/																							
					1.0 to 2.0	2.0 to 3.0	3.0 to 4.0	4.0 to 5.0	5.0 to 6.0	6.0 to 7.0	7.0 to 8.0	8.0 to 9.0	9.0 to 10.0	10.0 to 20.0	20.0 to 30.0	30.0 to 40.0	40.0 to 50.0	50.0 to 60.0	60.0 to 70.0	70.0 to 80.0	80.0 to 90.0	90.0 to 100.0	100.0 to 200.0	200.0 to 300.0	300.0 to 400.0	400.0 to 500.0	500.0 to 600.0	600.0 to 700.0
	Mollusca																											
189-001	Oyster, eastern	shucked	151	151																					S			
189-002	Oyster, Pacific (giant)	shucked	68	68																			S					
190-014	Scallop, Atlantic bay	adductor muscle	20	20										A														
190-016	Scallop, calico	shucked	10	10										S														
		adductor muscle	20	20										A														
190-028	Scallop, pink	adductor muscle	5	5								A																
190-013	Scallop, sea (smooth)	adductor muscle	11	11										A														
188-003	Squid, Atlantic longfinned	whole	23	23										W														
		mantle	107	107										N														
188-006	Squid, Pacific	whole	50	50										W														
188-014	Squid, shortfinned	mantle	92	92										N														
	Crustacea																											
196-001	Crab, blue	body meat	35	35												B												
		claw meat	4	4												C												
		claw & body meat	54	54												D												
196-011	Crab, dungeness	meat, unk.	40	40													U											
		claw & body meat	8	8												D												
196-012	Crab, king	meat, unk.	20	20														U										
		claw & body meat	9	9															D									
196-006	Crab, red, deep sea	meat, unk.	25	25											U													
196-003	Crab, rock	meat, unk.	15	15													U											
196-035	Crab, tanner (bairdi)	meat, unk.	50	50												U												
194-012	Lobster, northern (American)	body meat	2	2												B												
		claw meat	2	2												C												
		tail meat	2	2											T													
		leg meat	2	2													F											
		claw & tail meat	78	78											K													
194-002	Lobster, spiny (Atlantic)	tail meat	38	38											T													
194-003	Lobster, spiny (Pacific)	tail meat	5	5										T														
192-012	Shrimp, Alaska (sidestripe)	tail, peeled	16	16										P														
192-005	Shrimp, brown	tail, peeled	51	51										P														
192-007	Shrimp, ocean	tail, peeled	9	9										P														
192-010	Shrimp, pink	tail, peeled	49	49										P														
192-011	Shrimp, pink (northern)	tail, peeled	64	64										P														
192-003	Shrimp, royal red	tail, peeled	12	12										P														
192-004	Shrimp, white	tail, peeled	77	77										P														

1/ The letters in the boxes correspond to the tissue or cut of fish analyzed, as follows: a, adductor muscle; b, body meat; c, claw meat; d, claw & body meat; e, headed; f, leg meat; g, gutted; h, headed and gutted; k, claw & tail meat; l, liver; m, muscle; n, mantle, skinless; p, tail, peeled; q, milt; r, roe; s, shucked; t, tail meat; u, meat, unk.; w, whole.

2/ Mean analytical values falling on the upper limit of each range are included in the next higher range (e.g., 0.2 is included in the range 0.2 to 0.3 ppm and not 0.1 to 0.2 ppm).

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

ANCHOVY, STRIPED   ANCHOA HEPSETUS   001006   AREA- GULF   SITE- D4   H&G, TAILLESS

LENGTH	NUM	10	MEAN	0.115	S. D.	0.000	LOW	0.115	HIGH	0.115
WEIGHT	NUM	10	MEAN	0.015	S. D.	0.000	LOW	0.015	HIGH	0.015

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0000	0000	0006	0000
MEAN	0.091	0.891	0.143	0.848	0.436	0.112	0.213	0.359	13.09	0.469	0.179	0.356	1.327	0.854	0.894
S. D.	0.054	0.201	0.035	0.441	0.253	0.024	0.036	0.143	1.58	0.102	0.054	0.072	0.293	0.497	0.268
LOW	0.045	0.660	0.105	0.060	0.050	0.080	0.145	0.060	10.40	0.330	0.130	0.220	0.940	0.120	0.610
HIGH	0.210	1.310	0.210	1.575	0.810	0.160	0.250	0.560	15.41	0.620	0.270	0.470	1.845	1.220	1.310

ANCHOVY, STRIPED   ANCHOA HEPSETUS   001006   AREA- GULF   SITE- D5   H&G, TAILLESS

LENGTH	NUM	30	MEAN	0.116	S. D.	0.002	LOW	0.115	HIGH	0.120
WEIGHT	NUM	30	MEAN	0.015	S. D.	0.000	LOW	0.015	HIGH	0.015

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0030	0030	0030	0030	0030	0030	0028	0030	0030	0030	0029	0030	0030	0030	0030
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0003	0001	0000	0016	0000
MEAN	0.082	0.786	0.139	1.313	0.578	0.103	0.280	0.436	13.11	0.443	0.202	0.442	1.398	1.195	0.910
S. D.	0.046	0.274	0.034	0.786	0.247	0.024	0.154	0.189	3.19	0.121	0.060	0.175	0.521	0.464	0.256
LOW	0.020	0.440	0.060	0.300	0.040	0.030	0.060	0.180	3.13	0.180	0.130	0.130	0.170	0.190	0.440
HIGH	0.185	1.810	0.210	4.000	1.400	0.140	0.810	1.060	18.13	0.690	0.380	1.000	2.690	1.810	1.475

ANCHOVY, NORTHERN   ENGRAULIS MORDAX   001016   AREA- CALIFORNIA   SITE- F4   WHOLE

LENGTH	NUM	10	MEAN	0.112	S. D.	0.000	LOW	0.112	HIGH	0.112
WEIGHT	NUM	10	MEAN	0.008	S. D.	0.000	LOW	0.008	HIGH	0.008

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.080	1.603	0.164	3.255	0.531	0.131	0.447	1.066	23.15	0.927	0.332	0.709	4.872	2.269	1.955
S. D.	0.128	0.426	0.063	0.741	0.159	0.034	0.154	0.231	3.67	0.333	0.226	0.338	0.870	0.680	0.780
LOW	0.020	0.880	0.040	1.900	0.360	0.090	0.240	0.535	15.54	0.390	0.100	0.290	3.100	1.000	1.050
HIGH	0.340	2.340	0.230	3.930	0.815	0.180	0.650	1.300	28.92	1.555	0.690	1.250	6.180	3.480	3.245

ANCHOVY, NORTHERN   ENGRAULIS MORDAX   001016   AREA- CALIFORNIA   SITE- F8   WHOLE

LENGTH	NUM	10	MEAN	0.162	S. D.	0.010	LOW	0.152	HIGH	0.183
WEIGHT	NUM	10	MEAN	0.069	S. D.	0.010	LOW	0.060	HIGH	0.090

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010
N DET.	0008	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0000	0000	0002	0000
MEAN	0.025	1.233	0.357	5.641	0.469	0.111	0.341	1.193	21.76	0.779	0.271	0.371	1.645	1.728	1.155
S. D.	0.007	0.650	0.119	3.080	0.197	0.070	0.175	0.322	3.55	0.348	0.173	0.134	0.569	0.805	0.403
LOW	0.020	0.805	0.110	2.100	0.165	0.040	0.140	0.820	16.25	0.365	0.100	0.200	1.120	0.580	0.500
HIGH	0.030	3.000	0.570	11.950	0.840	0.260	0.780	2.015	28.69	1.460	0.620	0.625	3.055	2.750	2.000

ANCHOVY, NORTHERN   ENGRAULIS MORDAX   001016   AREA- CALIFORNIA   SITE- I8   WHOLE

LENGTH	NUM	10	MEAN	0.140	S. D.	0.000	LOW	0.140	HIGH	0.140
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0009	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.020	2.253	0.428	2.848	0.688	0.245	0.407	1.399	27.38	0.768	1.267	1.050	1.912	2.556	2.198
S. D.	0.000	0.586	0.065	1.503	0.168	0.106	0.133	0.654	7.48	0.119	0.505	0.576	0.417	0.571	0.592
LOW	0.000	1.500	0.340	0.900	0.460	0.095	0.190	0.250	19.19	0.640	0.470	0.413	1.450	1.280	1.530
HIGH	0.020	3.250	0.500	6.336	0.990	0.490	0.585	2.780	44.38	1.030	2.250	2.000	2.640	3.440	3.310

ANCHOVY, NORTHERN   ENGRAULIS MORDAX   001016   AREA- CALIFORNIA   SITE- K3   WHOLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.048	1.438	0.310	2.629	0.671	0.158	0.352	0.944	23.68	0.466	0.252	0.863	1.198	1.922	2.615
S. D.	0.027	0.412	0.071	0.989	0.195	0.039	0.135	0.406	5.43	0.046	0.095	0.400	0.398	0.338	0.643
LOW	0.020	0.940	0.185	1.200	0.460	0.090	0.140	0.190	16.25	0.410	0.110	0.500	0.560	1.405	1.660
HIGH	0.080	2.190	0.430	4.391	1.120	0.230	0.545	1.535	31.15	0.565	0.410	1.780	2.040	2.470	3.940

ARGENTINE, ATL.   ARGENTINA SILUS   002002   AREA- NORTH ATLANTIC   SITE- S4   H&G, TAILLESS

LENGTH	NUM	7	MEAN	0.200	S. D.	0.025	LOW	0.162	HIGH	0.219
WEIGHT	NUM	7	MEAN	0.064	S. D.	0.022	LOW	0.031	HIGH	0.084

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0006	0006	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0004	0000	0003	0000
MEAN	0.055	0.510	0.098	2.490	0.438	0.060	0.205	0.473	7.15	0.280	0.110	0.392	0.360	1.025	1.155
S. D.	0.035	0.308	0.055	1.213	0.278	0.020	0.089	0.221	2.10	0.116	0.044	0.310	0.069	0.285	0.666
LOW	0.030	0.060	0.050	0.870	0.155	0.030	0.060	0.150	3.06	0.130	0.060	0.205	0.230	0.630	0.440
HIGH	0.080	1.030	0.215	4.166	0.820	0.080	0.310	0.790	9.53	0.455	0.140	0.750	0.440	1.310	2.400

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

BARRACUDA, PAC. SPHYRAENA ARGENTEA 005001 AREA- CALIFORNIA SITE- K3 MUSCLE

LENGTH NUM 20 MEAN 0.616 S. D. 0.056 LOW 0.550 HIGH 0.729
WEIGHT NUM 9 MEAN 1.522 S. D. 0.448 LOW 1.025 HIGH 2.040

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0019	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0019
N DET.	0000	0000	0001	0000	0000	0005	0002	0000	0000	0002	0017	0019	0000	0002	0000
MEAN	0.172	0.638	0.110	2.530	0.415	0.034	0.381	0.423	6.35	0.202	0.293	0.060	0.156	0.912	0.869
S. D.	0.103	0.350	0.096	1.538	0.226	0.018	0.263	0.165	2.00	0.098	0.204	0.000	0.071	0.407	0.523
LOW	0.020	0.130	0.035	0.360	0.100	0.010	0.130	0.080	3.75	0.090	0.060	0.000	0.070	0.440	0.280
HIGH	0.365	1.310	0.460	5.760	1.090	0.070	0.950	0.755	10.11	0.520	0.440	0.060	0.340	2.000	2.250

BARRACUDA, ATL. SPHYRAENA BARRACUDA 005002 AREA- GULF SITE- L5 MUSCLE

LENGTH NUM 1 MEAN 1.168 S. D. 0.000 LOW 1.168 HIGH 1.168
WEIGHT NUM 5 MEAN 8.172 S. D. 3.740 LOW 3.178 HIGH 12.712

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0007	0007	0000	0006	0000
MEAN	2.168	0.297	0.064	3.047	0.692	0.021	0.219	0.482	4.82	0.266	0.000	0.000	0.115	0.090	0.566
S. D.	1.025	0.077	0.010	0.958	0.253	0.011	0.092	0.267	0.59	0.067	0.000	0.000	0.028	0.000	0.179
LOW	0.850	0.190	0.050	1.950	0.210	0.010	0.130	0.160	3.94	0.190	0.000	0.000	0.090	0.000	0.380
HIGH	3.400	0.410	0.080	4.300	0.920	0.035	0.380	1.000	5.50	0.380	0.000	0.000	0.165	0.090	0.840

BASS, BLACK SEA CENTROPRISTIS STRIATA 006006 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

LENGTH NUM 1 MEAN 0.293 S. D. 0.000 LOW 0.293 HIGH 0.293
WEIGHT NUM 1 MEAN 0.435 S. D. 0.000 LOW 0.435 HIGH 0.435

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.050	0.310	0.070	3.000	0.350	0.010	0.130	0.070	3.56	0.150	0.000	0.000	0.080	0.000	0.410
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.050	0.310	0.070	3.000	0.350	0.010	0.130	0.070	3.56	0.150	0.000	0.000	0.080	0.000	0.410

BASS, BLACK SEA CENTROPRISTIS STRIATA 006006 AREA- NORTH ATLANTIC SITE- R6 MUSCLE

LENGTH NUM 5 MEAN 0.230 S. D. 0.024 LOW 0.203 HIGH 0.264
WEIGHT NUM 5 MEAN 0.195 S. D. 0.062 LOW 0.136 HIGH 0.292

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0002	0000	0005	0000
MEAN	0.138	0.500	0.076	3.855	0.539	0.050	0.241	0.212	3.88	0.275	0.130	0.273	0.354	0.000	0.521
S. D.	0.091	0.112	0.011	2.522	0.170	0.018	0.137	0.091	0.62	0.054	0.000	0.129	0.244	0.000	0.054
LOW	0.040	0.310	0.070	1.750	0.340	0.035	0.105	0.125	3.00	0.215	0.000	0.130	0.180	0.000	0.470
HIGH	0.245	0.595	0.095	7.475	0.780	0.080	0.440	0.350	4.72	0.350	0.130	0.380	0.735	0.000	0.595

BASS, BLACK SEA CENTROPRISTIS STRIATA 006006 AREA- NORTH ATLANTIC SITE- S4 MUSCLE

LENGTH NUM 1 MEAN 0.177 S. D. 0.000 LOW 0.177 HIGH 0.177
WEIGHT NUM 1 MEAN 0.125 S. D. 0.000 LOW 0.125 HIGH 0.125

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.380	0.040	7.500	0.650	0.030	0.060	0.630	4.75	0.260	0.190	0.000	0.480	0.690	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.380	0.040	7.500	0.650	0.030	0.060	0.630	4.75	0.260	0.190	0.000	0.480	0.690	0.630

BASS, BLACK SEA CENTROPRISTIS STRIATA 006006 AREA- SOUTH ATLANTIC SITE- B5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 10 MEAN 0.227 S. D. 0.000 LOW 0.227 HIGH 0.227

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0001	0005	0000	0000	0005	0001	0001	0000	0003	0006	0004	0000	0004	0000
MEAN	0.113	0.729	0.088	12.402	0.725	0.058	0.213	0.218	4.52	0.340	0.258	0.403	0.210	1.262	0.590
S. D.	0.021	0.439	0.019	7.528	0.156	0.036	0.129	0.121	1.29	0.201	0.162	0.310	0.210	0.965	0.233
LOW	0.085	0.235	0.070	5.500	0.470	0.020	0.040	0.070	2.50	0.130	0.160	0.200	0.040	0.320	0.325
HIGH	0.145	1.650	0.112	26.550	0.965	0.110	0.400	0.385	7.00	0.750	0.500	1.020	0.790	3.000	0.940

BASS, BLACK SEA CENTROPRISTIS STRIATA 006006 AREA- SOUTH ATLANTIC SITE- B5 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 0.227 S. D. 0.000 LOW 0.227 HIGH 0.227

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.290	1.000	0.700	6.770	1.930	0.060	0.230	3.310	35.69	0.220	0.810	1.880	1.070	1.690	1.120
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.290	1.000	0.700	6.770	1.930	0.060	0.230	3.310	35.69	0.220	0.810	1.880	1.070	1.690	1.120

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

BASS, BLACK SEA CENTROPRISTIS STRIATA 006006 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

ENGTH NUM 22 MEAN 0.319 S. D. 0.055 LOW 0.264 HIGH 0.376
EIGHT NUM 22 MEAN 0.451 S. D. 0.127 LOW 0.323 HIGH 0.640

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
JMBER	0021	0022	0022	0021	0021	0022	0022	0021	0021	0022	0022	0022	0022	0022	0021
DET.	0000	0002	0004	0000	0000	0010	0002	0001	0000	0001	0019	0018	0001	0005	0000
EAN	0.193	0.379	0.059	11.681	0.568	0.040	0.166	0.145	3.97	0.269	0.230	0.288	0.139	0.592	0.441
. D.	0.118	0.151	0.030	5.797	0.193	0.013	0.091	0.069	1.59	0.133	0.185	0.145	0.070	0.277	0.160
LOW	0.030	0.170	0.030	4.058	0.215	0.030	0.060	0.040	1.43	0.080	0.090	0.120	0.040	0.060	0.190
HIGH	0.575	0.750	0.140	26.000	1.060	0.070	0.380	0.320	9.64	0.710	0.440	0.470	0.290	1.220	0.820

BASS, BLACK SEA CENTROPRISTIS STRIATA 006006 AREA- SOUTH ATLANTIC SITE- C2 LIVER

LENGTH NUM 1 MEAN 0.376 S. D. 0.000 LOW 0.376 HIGH 0.376
WEIGHT NUM 1 MEAN 0.567 S. D. 0.000 LOW 0.567 HIGH 0.567

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.470	1.810	1.790	12.800	1.700	0.060	0.190	5.310	22.94	0.320	0.190	0.310	1.160	0.630	0.820
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
IGH	0.470	1.810	1.790	12.800	1.700	0.060	0.190	5.310	22.94	0.320	0.190	0.310	1.160	0.630	0.820

BASS, BLACK SEA CENTROPRISTIS STRIATA 006006 AREA- SOUTH ATLANTIC SITE- J1 MUSCLE

LENGTH NUM 4 MEAN 0.262 S. D. 0.008 LOW 0.257 HIGH 0.274
WEIGHT NUM 4 MEAN 0.343 S. D. 0.047 LOW 0.307 HIGH 0.409

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0015	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016
N DET.	0000	0000	0001	0000	0000	0003	0001	0000	0000	0001	0014	0013	0001	0001	0000
MEAN	0.094	0.404	0.080	9.216	0.484	0.034	0.184	0.133	3.76	0.210	0.195	0.227	0.124	0.728	0.545
S. D.	0.047	0.197	0.045	3.094	0.146	0.012	0.148	0.056	0.73	0.137	0.120	0.064	0.046	0.310	0.179
LOW	0.050	0.080	0.045	4.850	0.250	0.010	0.060	0.020	2.14	0.040	0.110	0.190	0.070	0.310	0.325
HIGH	0.210	0.740	0.210	16.500	0.695	0.060	0.560	0.255	5.25	0.625	0.280	0.300	0.230	1.630	1.100

PERCH, SAND DIPLECTRUM FORMOSUM 006010 AREA- SOUTH ATLANTIC SITE- J4 MUSCLE

LENGTH NUM 1 MEAN 0.226 S. D. 0.000 LOW 0.226 HIGH 0.226
WEIGHT NUM 1 MEAN 0.375 S. D. 0.000 LOW 0.375 HIGH 0.375

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0001	0000	0000	0000
MEAN	0.620	0.100	0.040	2.125	0.510	0.130	0.090	0.190	6.40	0.000	0.000	0.000	0.125	0.150	0.400
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.620	0.100	0.040	2.125	0.510	0.130	0.090	0.190	6.40	0.000	0.000	0.000	0.125	0.150	0.400

HIND, SPECKLED EPINEPHELUS DRUMMONDHAYI 006013 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH NUM 20 MEAN 0.627 S. D. 0.130 LOW 0.460 HIGH 0.825
WEIGHT NUM 20 MEAN 6.221 S. D. 3.960 LOW 2.315 HIGH 16.458

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0019	0020	0019	0020	0020	0019	0020	0018
N DET.	0000	0000	0000	0000	0000	0005	0001	0000	0000	0000	0019	0019	0000	0000	0001
MEAN	0.179	0.453	0.069	2.798	0.907	0.032	0.163	0.340	5.31	0.169	0.060	0.310	0.071	0.630	0.492
S. D.	0.140	0.243	0.019	1.478	0.311	0.012	0.241	0.195	0.73	0.047	0.000	0.000	0.015	0.200	0.179
LOW	0.040	0.170	0.040	0.820	0.450	0.010	0.040	0.090	4.19	0.080	0.000	0.000	0.040	0.375	0.220
HIGH	0.610	1.250	0.110	7.250	1.890	0.060	1.125	0.815	7.12	0.240	0.060	0.310	0.090	1.190	0.970

HIND, SPECKLED EPINEPHELUS DRUMMONDHAYI 006013 AREA- SOUTH ATLANTIC SITE- C2 LIVER

LENGTH NUM 7 MEAN 0.674 S. D. 0.137 LOW 0.508 HIGH 0.825
WEIGHT NUM 7 MEAN 7.222 S. D. 3.799 LOW 2.894 HIGH 11.486

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0006	0007	0006	0005	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0000	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000	0005	0000	0000	0000
MEAN	0.941	0.308	0.612	4.997	4.864	0.036	0.121	7.034	25.40	0.185	0.246	0.220	0.468	0.514	0.337
S. D.	0.590	0.085	0.335	4.801	2.754	0.011	0.108	5.077	8.32	0.065	0.134	0.226	0.221	0.162	0.156
LOW	0.300	0.190	0.210	0.800	2.700	0.020	0.060	2.630	18.75	0.120	0.060	0.060	0.200	0.310	0.060
HIGH	2.050	0.440	1.060	14.225	9.135	0.050	0.310	17.310	42.19	0.275	0.380	0.380	0.810	0.750	0.500

JEWFISH EPINEPHELUS ITAJARA 006016 AREA- GULF SITE- B8 MUSCLE

LENGTH NUM 2 MEAN 0.477 S. D. 0.009 LOW 0.470 HIGH 0.483
WEIGHT NUM 2 MEAN 2.270 S. D. 0.000 LOW 2.270 HIGH 2.270

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002.	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0002	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.165	0.471	0.000	5.480	0.690	0.070	0.227	0.090	3.93	0.160	0.000	0.000	0.055	0.960	0.418
S. D.	0.042	0.134	0.000	6.675	0.099	0.000	0.108	0.028	0.50	0.127	0.000	0.000	0.028	0.948	0.166
LOW	0.135	0.376	0.000	0.760	0.620	0.000	0.150	0.070	3.57	0.070	0.000	0.000	0.035	0.290	0.300
HIGH	0.195	0.565	0.000	10.200	0.760	0.070	0.303	0.110	4.28	0.250	0.000	0.000	0.075	1.630	0.535

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

JEWFISH EPINEPHELUS ITAJARA 006016 AREA- GULF SITE- L9 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0005	0005	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0002	0000
MEAN	0.298	0.407	0.056	2.504	0.352	0.028	0.114	0.225	6.14	0.151	0.330	0.213	0.101	0.819	0.493
S. D.	0.087	0.121	0.017	1.873	0.092	0.006	0.036	0.070	1.52	0.057	0.251	0.112	0.054	0.091	0.114
LOW	0.160	0.250	0.030	0.581	0.220	0.020	0.060	0.110	4.28	0.075	0.060	0.060	0.070	0.720	0.350
HIGH	0.380	0.580	0.073	4.750	0.450	0.035	0.165	0.320	8.58	0.210	0.660	0.310	0.210	0.940	0.660

GROUPER, RED EPINEPHELUS MORIO 006017 AREA- GULF SITE- L5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0010	0000	0002	0000
MEAN	0.570	0.344	0.058	2.463	0.780	0.033	0.160	0.187	4.03	0.178	0.130	0.000	0.062	0.512	0.535
S. D.	0.091	0.157	0.009	1.420	0.152	0.010	0.066	0.055	0.90	0.077	0.000	0.000	0.018	0.173	0.199
LOW	0.450	0.220	0.040	0.740	0.465	0.015	0.050	0.085	2.31	0.060	0.000	0.000	0.040	0.310	0.250
HIGH	0.770	0.750	0.070	5.000	1.065	0.050	0.255	0.240	5.40	0.340	0.130	0.000	0.090	0.810	0.880

GROUPER, RED EPINEPHELUS MORIO 006017 AREA- GULF SITE- L8 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0009	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0009	0000	0000	0000
MEAN	0.453	0.308	0.056	2.405	0.666	0.028	0.196	0.211	5.03	0.181	0.000	0.440	0.070	0.521	0.491
S. D.	0.135	0.119	0.014	1.051	0.233	0.009	0.137	0.045	0.53	0.066	0.000	0.000	0.016	0.127	0.146
LOW	0.180	0.130	0.020	0.775	0.280	0.010	0.060	0.130	4.31	0.090	0.000	0.000	0.030	0.380	0.310
HIGH	0.710	0.500	0.070	4.000	1.010	0.040	0.405	0.280	5.88	0.280	0.000	0.440	0.080	0.750	0.810

GROUPER, RED EPINEPHELUS MORIO 006017 AREA- GULF SITE- L9 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0021	0021	0021	0020	0020	0021	0021	0021	0021	0021	0021	0021	0021	0021	0020
N DET.	0000	0000	0003	0000	0000	0003	0002	0000	0000	0000	0016	0015	0001	0003	0000
MEAN	0.262	0.354	0.062	2.203	0.755	0.029	0.260	0.205	3.83	0.223	0.368	0.172	0.082	0.651	0.495
S. D.	0.103	0.193	0.018	1.514	0.200	0.008	0.365	0.077	0.77	0.106	0.322	0.110	0.045	0.198	0.186
LOW	0.100	0.100	0.030	0.240	0.400	0.010	0.050	0.070	2.25	0.070	0.060	0.060	0.020	0.310	0.205
HIGH	0.545	0.810	0.090	5.500	1.140	0.040	1.595	0.390	5.12	0.500	0.870	0.370	0.230	1.060	1.060

GROUPER, BLACK MYCTEROPERCA BONACI 006037 AREA- GULF SITE- I9 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014
N DET.	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000	0007	0009	0000	0000	0000
MEAN	1.014	0.348	0.050	3.286	1.197	0.034	0.118	0.169	3.67	0.185	0.184	0.582	0.075	0.692	0.525
S. D.	0.255	0.103	0.017	1.023	0.379	0.011	0.049	0.052	0.69	0.055	0.113	0.382	0.016	0.242	0.128
LOW	0.470	0.190	0.020	1.962	0.630	0.010	0.050	0.050	2.56	0.110	0.060	0.310	0.060	0.310	0.310
HIGH	1.330	0.560	0.080	5.275	1.850	0.050	0.220	0.223	4.89	0.280	0.370	1.250	0.110	1.130	0.750

GROUPER, BLACK MYCTEROPERCA BONACI 006037 AREA- GULF SITE- L5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0010	0000	0001	0000
MEAN	0.748	0.303	0.064	2.533	0.626	0.029	0.240	0.244	4.50	0.208	0.000	0.000	0.069	0.619	0.482
S. D.	0.239	0.166	0.012	0.978	0.220	0.015	0.220	0.095	1.17	0.062	0.000	0.000	0.015	0.211	0.143
LOW	0.470	0.130	0.050	1.150	0.250	0.020	0.040	0.100	2.69	0.110	0.000	0.000	0.040	0.380	0.310
HIGH	1.030	0.630	0.090	4.500	1.010	0.070	0.760	0.380	6.88	0.290	0.000	0.000	0.090	1.050	0.590

GROUPER, BLACK MYCTEROPERCA BONACI 006037 AREA- GULF SITE- R3 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0010	0010	0009	0009	0010	0010	0009	0009	0010	0009	0010	0010	0010	0010
N DET.	0000	0001	0002	0000	0000	0004	0001	0000	0000	0002	0005	0005	0001	0002	0000
MEAN	0.487	0.700	0.076	4.822	1.037	0.038	0.205	0.170	5.27	0.263	0.265	0.253	0.082	0.598	0.570
S. D.	0.126	0.396	0.037	1.216	0.181	0.016	0.069	0.066	1.38	0.155	0.204	0.150	0.038	0.250	0.152
LOW	0.360	0.060	0.040	3.200	0.750	0.010	0.110	0.100	3.50	0.125	0.060	0.120	0.020	0.200	0.380
HIGH	0.750	1.440	0.140	6.825	1.250	0.055	0.310	0.290	8.10	0.570	0.440	0.440	0.130	1.000	0.780

GROUPER, YELLOWMOUTH MYCTEROPERCA INTERSTITIALIS 006038 AREA- SOUTH ATLANTIC SITE- B6 MUSCLE

LENGTH NUM 10 MEAN 0.850 S. D. 0.000 LOW 0.850 HIGH 0.850
WEIGHT NUM 10 MEAN 8.618 S. D. 0.000 LOW 8.618 HIGH 8.618

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0000	0002	0000	0000	0005	0000	0000	0000	0002	0008	0007	0000	0002	0000
MEAN	0.228	0.583	0.074	7.498	0.761	0.044	0.180	0.144	3.66	0.174	0.200	0.367	0.072	0.962	0.573
S. D.	0.065	0.229	0.036	7.841	0.192	0.015	0.089	0.063	0.99	0.068	0.113	0.181	0.019	0.532	0.217
LOW	0.125	0.250	0.030	1.700	0.485	0.030	0.070	0.060	2.43	0.070	0.120	0.160	0.040	0.400	0.300
HIGH	0.335	0.940	0.130	28.500	1.055	0.070	0.330	0.235	5.25	0.290	0.280	0.500	0.110	1.750	0.940

GROUPER, YELLOWMOUTH MYCTEROPERCA INTERSTITIALIS 006038 AREA- SOUTH ATLANTIC SITE- B6 LIVER

LENGTH NUM 1 MEAN 0.850 S. D. 0.000 LOW 0.850 HIGH 0.850
WEIGHT NUM 1 MEAN 8.618 S. D. 0.000 LOW 8.618 HIGH 8.618

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001
MEAN	2.520	0.040	2.240	1.720	1.015	0.050	0.050	9.080	41.90	0.220	0.900	0.650	1.220	1.000	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	2.520	0.040	2.240	1.720	1.015	0.050	0.050	9.080	41.90	0.220	0.900	0.650	1.220	1.000	0.000

GAG MYCTEROPERCA MICROLEPIS 006040 AREA- GULF SITE- L5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0010	0000	0002	0000
MEAN	0.683	0.272	0.066	3.323	1.042	0.031	0.244	0.183	3.84	0.178	0.000	0.000	0.064	0.453	0.505
S. D.	0.239	0.099	0.013	2.262	0.488	0.004	0.168	0.054	0.92	0.054	0.000	0.000	0.020	0.221	0.151
LOW	0.400	0.185	0.050	1.270	0.520	0.025	0.060	0.090	2.90	0.120	0.000	0.000	0.040	0.050	0.310
HIGH	1.080	0.500	0.090	7.450	2.300	0.040	0.530	0.250	6.25	0.280	0.000	0.000	0.110	0.810	0.810

GAG MYCTEROPERCA MICROLEPIS 006040 AREA- GULF SITE- L9 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0019	0019	0020	0020	0020	0019	0019	0020	0020	0020	0020	0020
N DET.	0000	0000	0002	0000	0000	0005	0001	0000	0000	0000	0015	0012	0002	0001	0000
MEAN	0.429	0.319	0.051	4.547	0.664	0.033	0.160	0.167	4.20	0.158	0.204	0.309	0.075	0.639	0.475
S. D.	0.130	0.153	0.019	2.454	0.242	0.018	0.095	0.062	1.31	0.081	0.129	0.177	0.033	0.331	0.214
LOW	0.230	0.100	0.020	0.600	0.330	0.010	0.030	0.050	1.44	0.060	0.030	0.060	0.025	0.280	0.010
HIGH	0.650	0.630	0.090	10.000	1.270	0.083	0.405	0.270	6.21	0.340	0.370	0.500	0.160	1.650	0.940

SCAMP MYCTEROPERCA PHENAX 006041 AREA- SOUTH ATLANTIC SITE- B5 MUSCLE

LENGTH NUM 10 MEAN 0.572 S. D. 0.041 LOW 0.480 HIGH 0.630
WEIGHT NUM 10 MEAN 4.000 S. D. 0.628 LOW 2.724 HIGH 5.039

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0007	0008	0000	0000	0000
MEAN	0.347	0.336	0.051	3.267	0.662	0.028	0.146	0.196	3.23	0.179	0.133	0.500	0.076	0.552	0.483
S. D.	0.056	0.066	0.011	1.554	0.133	0.012	0.103	0.114	0.73	0.054	0.102	0.269	0.028	0.159	0.118
LOW	0.280	0.250	0.035	1.520	0.480	0.010	0.040	0.060	2.25	0.090	0.060	0.310	0.030	0.255	0.310
HIGH	0.480	0.440	0.070	6.195	0.950	0.050	0.333	0.380	4.94	0.255	0.250	0.690	0.120	0.750	0.625

SCAMP MYCTEROPERCA PHENAX 006041 AREA- SOUTH ATLANTIC SITE- B5 LIVER

LENGTH NUM 1 MEAN 0.572 S. D. 0.000 LOW 0.572 HIGH 0.572
WEIGHT NUM 1 MEAN 4.000 S. D. 0.000 LOW 4.000 HIGH 4.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	3.700	0.630	1.690	4.250	3.300	0.130	0.190	18.130	59.38	0.210	0.000	1.810	1.250	1.300	0.220
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	3.700	0.630	1.690	4.250	3.300	0.130	0.190	18.130	59.38	0.210	0.000	1.810	1.250	1.300	0.220

PERCH, WHITE MORONE AMERICANA 007001 AREA- NORTH ATLANTIC SITE- M8 H&G, TAILLESS

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0018	0019	0019	0018	0018	0019	0019	0019	0019	0019	0019	0018	0019	0019	0018
N DET.	0002	0000	0001	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.055	1.584	0.119	2.143	1.166	0.158	0.459	1.224	14.66	0.479	0.400	0.963	2.927	2.067	1.883
S. D.	0.031	0.518	0.037	1.334	0.457	0.049	0.181	0.860	5.07	0.106	0.153	0.445	1.271	0.533	0.798
LOW	0.020	0.440	0.060	0.300	0.435	0.050	0.190	0.190	6.19	0.290	0.190	0.410	0.480	1.000	0.060
HIGH	0.120	2.220	0.170	5.000	2.225	0.235	0.785	4.065	27.62	0.720	0.870	1.810	5.200	2.810	3.560

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

PERCH, WHITE MORONE AMERICANA 007001 AREA- NORTH ATLANTIC SITE- M8 MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0000	0000
MEAN	0.112	0.752	0.068	1.704	1.470	0.078	0.535	1.027	7.23	0.283	0.155	0.700	0.598	0.950	1.010
S. D.	0.020	0.123	0.008	0.480	0.409	0.020	0.407	0.310	0.76	0.006	0.049	0.000	0.175	0.371	0.035
LOW	0.100	0.630	0.060	1.400	1.120	0.055	0.205	0.800	6.69	0.280	0.120	0.000	0.495	0.535	0.985
HIGH	0.135	0.875	0.075	2.258	1.920	0.090	0.990	1.380	8.09	0.290	0.190	0.700	0.800	1.250	1.035

PERCH, WHITE MORONE AMERICANA 007001 AREA- NORTH ATLANTIC SITE- M9 MUSCLE

LENGTH	NUM	5	MEAN	0.174	S. D.	0.021	LOW	0.151	HIGH	0.202
WEIGHT	NUM	5	MEAN	0.097	S. D.	0.037	LOW	0.061	HIGH	0.149

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0005	0000	0000	0000
MEAN	0.141	0.606	0.073	1.600	0.946	0.048	0.208	0.951	8.27	0.240	0.000	0.000	0.392	0.605	0.567
S. D.	0.067	0.401	0.034	0.428	0.288	0.019	0.167	0.409	2.41	0.103	0.000	0.000	0.141	0.193	0.160
LOW	0.040	0.260	0.040	1.225	0.600	0.030	0.090	0.565	4.81	0.080	0.000	0.000	0.270	0.310	0.345
HIGH	0.200	1.300	0.130	2.125	1.320	0.080	0.500	1.560	10.59	0.350	0.000	0.000	0.570	0.850	0.690

PERCH, WHITE MORONE AMERICANA 007001 AREA- NORTH ATLANTIC SITE- R5 MUSCLE

LENGTH	NUM	10	MEAN	0.212	S. D.	0.000	LOW	0.212	HIGH	0.212
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0009	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0007	0007	0000	0000	0000
MEAN	0.176	0.763	0.095	1.976	0.463	0.028	0.188	0.383	4.81	0.182	0.147	0.273	0.398	0.798	0.553
S. D.	0.052	0.511	0.053	1.015	0.094	0.009	0.093	0.073	0.87	0.056	0.096	0.097	0.160	0.150	0.131
LOW	0.100	0.310	0.040	0.750	0.320	0.010	0.130	0.300	4.06	0.100	0.060	0.190	0.080	0.630	0.250
HIGH	0.255	1.880	0.220	3.600	0.600	0.040	0.380	0.510	6.88	0.260	0.250	0.380	0.630	1.130	0.750

PERCH, WHITE MORONE AMERICANA 007001 AREA- NORTH ATLANTIC SITE- R6 MUSCLE

LENGTH	NUM	9	MEAN	0.231	S. D.	0.000	LOW	0.231	HIGH	0.231
WEIGHT	NUM	9	MEAN	0.199	S. D.	0.000	LOW	0.199	HIGH	0.199

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0008	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0006	0004	0000	0001	0000
MEAN	0.216	0.401	0.075	2.133	0.738	0.039	0.185	0.527	4.13	0.274	0.493	0.180	0.528	0.935	0.892
S. D.	0.025	0.193	0.046	1.443	0.294	0.008	0.064	0.363	1.10	0.118	0.352	0.155	0.260	0.492	0.354
LOW	0.170	0.130	0.030	0.600	0.360	0.030	0.130	0.030	2.75	0.140	0.190	0.040	0.270	0.370	0.565
HIGH	0.250	0.750	0.180	4.750	1.180	0.050	0.310	1.100	6.40	0.465	0.880	0.430	0.970	1.880	1.630

BASS, STRIPED MORONE SAXATILIS 007004 AREA- NORTH ATLANTIC SITE- M6 MUSCLE

LENGTH	NUM	16	MEAN	0.446	S. D.	0.027	LOW	0.385	HIGH	0.510
WEIGHT	NUM	16	MEAN	1.399	S. D.	0.225	LOW	0.915	HIGH	2.014

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0016	0016	0016	0015	0015	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016
N DET.	0008	0000	0000	0001	0000	0000	0000	0000	0000	0000	0016	0014	0000	0016	0000
MEAN	0.052	0.268	0.055	2.020	0.916	0.026	0.237	0.320	3.46	0.256	0.000	0.155	0.167	0.000	0.526
S. D.	0.038	0.106	0.011	1.126	0.252	0.008	0.171	0.155	0.77	0.126	0.000	0.134	0.037	0.000	0.167
LOW	0.020	0.020	0.040	0.475	0.500	0.010	0.060	0.060	2.63	0.175	0.000	0.060	0.100	0.000	0.380
HIGH	0.140	0.470	0.075	5.000	1.545	0.040	0.560	0.540	6.09	0.710	0.000	0.250	0.260	0.000	0.845

BASS, STRIPED MORONE SAXATILIS 007004 AREA- NORTH ATLANTIC SITE- N7 MUSCLE

LENGTH	NUM	1	MEAN	0.670	S. D.	0.000	LOW	0.670	HIGH	0.670
WEIGHT	NUM	1	MEAN	3.632	S. D.	0.000	LOW	3.632	HIGH	3.632

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.495	0.530	0.075	1.546	0.693	0.020	0.130	0.345	3.75	0.225	0.000	0.000	0.135	0.720	0.420
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.495	0.530	0.075	1.546	0.693	0.020	0.130	0.345	3.75	0.225	0.000	0.000	0.135	0.720	0.420

BASS, STRIPED MORONE SAXATILIS 007004 AREA- NORTH ATLANTIC SITE- R5 MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010
N DET.	0000	0001	0005	0000	0000	0004	0001	0000	0000	0003	0006	0007	0000	0003	0000
MEAN	0.170	0.482	0.069	1.702	0.596	0.037	0.138	0.355	5.23	0.218	0.338	0.370	0.170	0.629	0.590
S. D.	0.047	0.405	0.034	1.020	0.217	0.019	0.093	0.110	4.94	0.106	0.295	0.230	0.087	0.309	0.147
LOW	0.120	0.050	0.040	0.100	0.340	0.020	0.056	0.210	1.53	0.090	0.100	0.140	0.030	0.360	0.375
HIGH	0.265	1.250	0.110	3.050	0.890	0.070	0.305	0.555	18.93	0.400	0.750	0.600	0.310	1.250	0.870

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                                     TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                      REPORT   MF17
                                    IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                   BY TISSUE AND LOCATION

 BASS, STRIPED                MORONE SAXATILIS               007004   AREA- NORTH ATLANTIC      SITE- R5   LIVER

 LENGTH     NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH        0.000
 WEIGHT     NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH        0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM     PPM     PPM     PPM     PPM

 NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
 N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0000    0000    0000
 MEAN      0.140   0.640   1.530   1.225   1.220   0.070   0.392   2.285   15.89   0.360   0.390   0.000   1.750   1.880   0.400
 S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 HIGH      0.140   0.640   1.530   1.225   1.220   0.070   0.392   2.285   15.89   0.360   0.390   0.000   1.750   1.880   0.400

 BASS, STRIPED                MORONE SAXATILIS               007004   AREA- NORTH ATLANTIC      SITE- R8   MUSCLE

 LENGTH     NUM   10   MEAN       0.363   S. D.      0.000   LOW      0.363   HIGH        0.363
 WEIGHT     NUM   10   MEAN       0.652   S. D.      0.000   LOW      0.652   HIGH        0.652
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM     PPM     PPM     PPM     PPM

 NUMBER     0010    0009    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0009    0010    0010
 N DET.     0000    0000    0000    0000    0000    0001    0000    0000    0000    0000    0010    0009    0000    0000    0000
 MEAN      0.097   0.482   0.084   3.599   0.321   0.026   0.302   0.286    4.66   0.205   0.000   0.380   0.136   0.719   0.501
 S. D.     0.055   0.294   0.056   2.007   0.088   0.008   0.287   0.089    0.99   0.039   0.000   0.000   0.026   0.163   0.103
 LOW       0.040   0.180   0.050   1.300   0.120   0.010   0.060   0.150    3.31   0.130   0.000   0.000   0.105   0.440   0.380
 HIGH      0.240   1.060   0.240   8.000   0.410   0.040   0.880   0.400    7.13   0.265   0.000   0.380   0.180   0.940   0.660

 BASS, STRIPED                MORONE SAXATILIS               007004   AREA- CALIFORNIA          SITE- F1   MUSCLE

 LENGTH     NUM    5   MEAN       0.760   S. D.      0.226   LOW      0.450   HIGH        1.050
 WEIGHT     NUM    5   MEAN       5.266   S. D.      4.606   LOW      1.135   HIGH       13.166
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM     PPM     PPM     PPM     PPM

 NUMBER     0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005
 N DET.     0000    0000    0000    0000    0000    0001    0002    0000    0000    0000    0004    0005    0000    0000    0000
 MEAN      0.617   0.363   0.051   1.316   0.557   0.026   0.093   0.289    3.78   0.172   0.130   0.000   0.086   0.625   0.528
 S. D.     0.357   0.055   0.017   0.743   0.249   0.015   0.003   0.121    0.45   0.032   0.000   0.000   0.017   0.161   0.119
 LOW       0.160   0.310   0.030   0.300   0.230   0.010   0.090   0.165    3.31   0.130   0.000   0.000   0.060   0.440   0.340
 HIGH      1.080   0.440   0.075   2.330   0.920   0.045   0.095   0.440    4.44   0.220   0.130   0.000   0.100   0.810   0.670

 BASS, STRIPED                MORONE SAXATILIS               007004   AREA- CALIFORNIA          SITE- F1   LIVER

 LENGTH     NUM    1   MEAN       0.737   S. D.      0.000   LOW      0.737   HIGH        0.737
 WEIGHT     NUM    1   MEAN       4.900   S. D.      0.000   LOW      4.900   HIGH        4.900
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM     PPM     PPM     PPM     PPM

 NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
 N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000
 MEAN      1.030   0.380   0.440   2.550   2.430   0.030   0.060   4.750   26.88   0.240   0.160   0.310   1.050   0.220   0.690
 S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 HIGH      1.030   0.380   0.440   2.550   2.430   0.030   0.060   4.750   26.88   0.240   0.160   0.310   1.050   0.220   0.690

 BASS, STRIPED                MORONE SAXATILIS               007004   AREA- CALIFORNIA          SITE- F2   MUSCLE

 LENGTH     NUM   27   MEAN       0.693   S. D.      0.152   LOW      0.470   HIGH        1.190
 WEIGHT     NUM   27   MEAN       4.587   S. D.      3.927   LOW      1.070   HIGH       20.500
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM     PPM     PPM     PPM     PPM

 NUMBER     0028    0028    0028    0027    0027    0028    0027    0028    0028    0028    0028    0028    0026    0028    0027
 N DET.     0001    0000    0004    0001    0000    0010    0001    0000    0000    0003    0025    0024    0001    0003    0000
 MEAN      0.432   0.387   0.068   1.981   0.494   0.028   0.151   0.305    3.73   0.188   0.187   0.200   0.112   0.587   0.461
 S. D.     0.345   0.190   0.043   0.873   0.252   0.007   0.094   0.128    0.72   0.083   0.095   0.096   0.028   0.162   0.152
 LOW       0.090   0.050   0.020   0.300   0.020   0.015   0.050   0.030    2.14   0.020   0.090   0.120   0.060   0.280   0.220
 HIGH      1.685   0.750   0.235   3.585   1.025   0.040   0.380   0.530    4.94   0.430   0.280   0.310   0.180   0.910   0.900

 BASS, STRIPED                MORONE SAXATILIS               007004   AREA- CALIFORNIA          SITE- F2   LIVER

 LENGTH     NUM    1   MEAN       0.718   S. D.      0.000   LOW      0.718   HIGH        0.718
 WEIGHT     NUM    1   MEAN       6.031   S. D.      0.000   LOW      6.031   HIGH        6.031
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM     PPM     PPM     PPM     PPM

 NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
 N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000
 MEAN      1.550   0.500   1.380   2.675   1.900   0.030   0.060   6.880   38.75   0.180   0.310   0.380   0.980   0.380   0.750
 S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 HIGH      1.550   0.500   1.380   2.675   1.900   0.030   0.060   6.880   38.75   0.180   0.310   0.380   0.980   0.380   0.750

 BASS, STRIPED                MORONE SAXATILIS               007004   AREA- CALIFORNIA          SITE- F4   MUSCLE

 LENGTH     NUM    7   MEAN       0.603   S. D.      0.146   LOW      0.445   HIGH        0.770
 WEIGHT     NUM    7   MEAN       3.406   S. D.      2.063   LOW      1.212   HIGH        5.670
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM     PPM     PPM     PPM     PPM

 NUMBER     0007    0007    0007    0007    0007    0007    0007    0007    0007    0007    0007    0007    0007    0007    0007
 N DET.     0000    0001    0002    0000    0000    0004    0001    0000    0000    0002    0005    0006    0001    0001    0000
 MEAN      0.539   0.546   0.068   1.470   0.690   0.023   0.157   0.379    3.54   0.135   0.250   0.400   0.114   0.665   0.534
 S. D.     0.458   0.205   0.031   1.009   0.145   0.015   0.077   0.081    0.57   0.053   0.000   0.000   0.021   0.325   0.115
 LOW       0.135   0.285   0.040   0.450   0.460   0.010   0.095   0.235    2.42   0.075   0.250   0.000   0.090   0.050   0.400
 HIGH      1.195   0.886   0.110   3.370   0.875   0.040   0.283   0.470    4.03   0.200   0.250   0.400   0.145   0.940   0.720
```

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

BASS, STRIPED   MORONE SAXATILIS   007004   AREA- PACIFIC NORTHWEST   SITE- R5   MUSCLE

LENGTH	NUM	40	MEAN	0.750	S. D.	0.176	LOW	0.460	HIGH	1.150
WEIGHT	NUM	40	MEAN	6.738	S. D.	5.837	LOW	1.105	HIGH	22.870

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0040	0040	0040	0038	0039	0040	0040	0039	0040	0040	0040	0040	0038	0040	0038
N DET.	0001	0000	0000	0000	0000	0015	0003	0000	0000	0000	0035	0038	0000	0002	0000
MEAN	0.858	0.442	0.062	2.289	0.464	0.028	0.151	0.204	4.23	0.181	0.130	0.315	0.111	0.604	0.460
S. D.	0.429	0.334	0.020	1.055	0.213	0.011	0.155	0.085	0.84	0.048	0.049	0.092	0.036	0.193	0.131
LOW	0.320	0.190	0.030	0.300	0.080	0.010	0.060	0.040	3.25	0.050	0.060	0.250	0.050	0.185	0.190
HIGH	2.000	2.190	0.140	4.500	1.045	0.050	0.875	0.375	7.44	0.260	0.190	0.380	0.200	1.060	0.780

SAILFISH   ISTIOPHORUS PLATYPTERUS   011001   AREA- NORTH ATLANTIC   SITE- H9   MUSCLE

LENGTH	NUM	1	MEAN	1.610	S. D.	0.000	LOW	1.610	HIGH	1.610
WEIGHT	NUM	1	MEAN	19.976	S. D.	0.000	LOW	19.976	HIGH	19.976

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.245	0.405	0.085	3.025	0.640	0.020	0.250	0.350	4.66	0.190	0.000	0.000	0.085	0.750	0.410
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.245	0.405	0.085	3.025	0.640	0.020	0.250	0.350	4.66	0.190	0.000	0.000	0.085	0.750	0.410

SAILFISH   ISTIOPHORUS PLATYPTERUS   011001   AREA- NORTH ATLANTIC   SITE- R6   MUSCLE

LENGTH	NUM	1	MEAN	1.500	S. D.	0.000	LOW	1.500	HIGH	1.500
WEIGHT	NUM	1	MEAN	14.061	S. D.	0.000	LOW	14.061	HIGH	14.061

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.135	0.595	0.090	3.266	0.390	0.025	0.130	0.305	4.93	0.210	0.000	0.000	0.090	0.595	0.280
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.135	0.595	0.090	3.266	0.390	0.025	0.130	0.305	4.93	0.210	0.000	0.000	0.090	0.595	0.280

SAILFISH   ISTIOPHORUS PLATYPTERUS   011001   AREA- NORTH ATLANTIC   SITE- R9   MUSCLE

LENGTH	NUM	9	MEAN	1.540	S. D.	0.078	LOW	1.440	HIGH	1.660
WEIGHT	NUM	9	MEAN	15.775	S. D.	1.679	LOW	13.154	HIGH	18.597

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0008	0008	0009	0009	0008	0008	0008	0008	0008	0008	0008	0008	0008	0006
N DET.	0000	0000	0000	0000	0000	0004	0000	0000	0000	0000	0008	0007	0000	0000	0000
MEAN	0.687	0.438	0.071	3.657	0.806	0.030	0.188	0.221	6.43	0.172	0.000	0.250	0.131	0.615	0.568
S. D.	0.446	0.243	0.018	1.349	0.266	0.014	0.170	0.136	0.63	0.073	0.000	0.000	0.022	0.199	0.219
LOW	0.150	0.155	0.050	2.200	0.440	0.010	0.060	0.080	5.62	0.060	0.000	0.000	0.105	0.440	0.440
HIGH	1.610	0.830	0.100	5.875	1.250	0.040	0.560	0.505	7.50	0.310	0.000	0.250	0.170	1.060	1.000

SAILFISH   ISTIOPHORUS PLATYPTERUS   011001   AREA- SOUTH ATLANTIC   SITE- C2   MUSCLE

LENGTH	NUM	2	MEAN	1.590	S. D.	0.071	LOW	1.540	HIGH	1.640
WEIGHT	NUM	2	MEAN	15.195	S. D.	2.886	LOW	13.154	HIGH	17.236

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.345	0.455	0.075	3.113	0.790	0.030	0.095	0.210	6.49	0.108	0.000	0.000	0.105	0.535	0.415
S. D.	0.332	0.502	0.021	1.715	0.000	0.000	0.049	0.198	0.06	0.053	0.000	0.000	0.035	0.134	0.035
LOW	0.110	0.100	0.060	1.900	0.790	0.000	0.060	0.070	6.44	0.070	0.000	0.000	0.080	0.440	0.390
HIGH	0.580	0.810	0.090	4.325	0.790	0.030	0.130	0.350	6.53	0.145	0.000	0.000	0.130	0.630	0.440

SAILFISH   ISTIOPHORUS PLATYPTERUS   011001   AREA- SOUTH ATLANTIC   SITE- M1   MUSCLE

LENGTH	NUM	11	MEAN	1.673	S. D.	0.115	LOW	1.490	HIGH	1.900
WEIGHT	NUM	11	MEAN	22.845	S. D.	4.587	LOW	13.608	HIGH	29.938

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0011	0011	0011	0010	0011	0011	0011	0011	0009
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0007	0008	0000	0002	0000
MEAN	0.555	0.314	0.145	3.145	0.771	0.024	0.145	0.725	6.95	0.212	0.425	0.680	0.165	0.581	0.511
S. D.	0.315	0.142	0.101	1.863	0.180	0.011	0.076	0.466	2.58	0.045	0.474	0.659	0.103	0.328	0.188
LOW	0.050	0.143	0.050	0.400	0.535	0.010	0.060	0.130	0.50	0.140	0.060	0.130	0.080	0.220	0.190
HIGH	1.120	0.630	0.350	6.650	1.130	0.040	0.295	1.630	9.78	0.285	1.120	1.410	0.440	1.190	0.750

SAILFISH   ISTIOPHORUS PLATYPTERUS   011001   AREA- SOUTH ATLANTIC   SITE- M1   LIVER

LENGTH	NUM	2	MEAN	1.845	S. D.	0.078	LOW	1.790	HIGH	1.900
WEIGHT	NUM	2	MEAN	27.897	S. D.	2.887	LOW	25.855	HIGH	29.938

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000	0000	0000
MEAN	0.435	0.315	2.910	2.355	2.900	0.015	0.250	6.455	60.91	0.290	0.640	0.000	0.700	1.235	0.750
S. D.	0.035	0.177	1.329	0.000	0.000	0.007	0.212	1.124	56.16	0.057	0.679	0.000	0.212	0.191	0.000
LOW	0.410	0.190	1.970	0.000	0.000	0.010	0.100	5.660	21.20	0.250	0.160	0.000	0.550	1.100	0.000
HIGH	0.460	0.440	3.850	2.355	2.900	0.020	0.400	7.250	100.62	0.330	1.120	0.000	0.850	1.370	0.750

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

REPORT MF17

LOCATION LEVEL 5

SAILFISH ISTIOPHORUS PLATYPTERUS 011001 AREA- SOUTH ATLANTIC SITE- M4 MUSCLE

LENGTH NUM 10 MEAN 1.380 S. D. 0.217 LOW 1.080 HIGH 1.660
WEIGHT NUM 10 MEAN 11.388 S. D. 5.642 LOW 4.989 HIGH 21.338

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0001	0000	0000	0000	0000	0002	0000	0000	0000	0000	0010	0010	0000	0000	0000
MEAN	0.314	0.462	0.088	2.917	0.985	0.022	0.129	0.230	5.15	0.178	0.000	0.000	0.102	0.582	0.448
S. D.	0.282	0.107	0.055	1.160	0.354	0.008	0.114	0.064	1.09	0.047	0.000	0.000	0.025	0.237	0.153
LOW	0.030	0.345	0.030	1.300	0.280	0.010	0.060	0.090	2.63	0.080	0.000	0.000	0.060	0.310	0.190
HIGH	0.900	0.630	0.180	5.000	1.490	0.030	0.380	0.320	6.30	0.240	0.000	0.000	0.140	0.940	0.725

SAILFISH ISTIOPHORUS PLATYPTERUS 011001 AREA- GULF SITE- E4 MUSCLE

LENGTH NUM 3 MEAN 1.962 S. D. 0.377 LOW 1.530 HIGH 2.222
WEIGHT NUM 4 MEAN 13.276 S. D. 2.991 LOW 9.988 HIGH 16.783

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0004	0004	0000	0003	0000
MEAN	0.815	0.296	0.061	2.502	0.704	0.020	0.119	0.491	5.49	0.193	0.000	0.000	0.096	0.630	0.520
S. D.	0.509	0.112	0.002	0.535	0.353	0.000	0.055	0.368	1.37	0.030	0.000	0.000	0.029	0.000	0.055
LOW	0.250	0.160	0.060	1.800	0.210	0.020	0.060	0.140	3.94	0.150	0.000	0.000	0.060	0.000	0.440
HIGH	1.330	0.400	0.065	3.000	1.005	0.020	0.190	0.980	6.81	0.220	0.000	0.000	0.130	0.630	0.560

SAILFISH ISTIOPHORUS PLATYPTERUS 011001 AREA- GULF SITE- L5 MUSCLE

LENGTH NUM 5 MEAN 1.608 S. D. 0.081 LOW 1.520 HIGH 1.700
WEIGHT NUM 5 MEAN 17.830 S. D. 5.663 LOW 12.701 HIGH 25.855

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0002	0000	0000	0000	0000	0000	0000	0003	0005	0002	0000	0000	0000
MEAN	0.411	0.374	0.117	5.294	0.768	0.170	0.100	0.558	4.67	0.075	0.000	0.327	0.151	0.515	0.412
S. D.	0.110	0.213	0.150	3.031	0.260	0.195	0.035	0.107	0.80	0.007	0.000	0.264	0.027	0.270	0.137
LOW	0.246	0.120	0.020	0.980	0.320	0.010	0.065	0.426	3.53	0.070	0.000	0.150	0.115	0.310	0.185
HIGH	0.540	0.620	0.290	8.450	0.970	0.430	0.136	0.690	5.47	0.080	0.000	0.630	0.190	0.970	0.545

SAILFISH ISTIOPHORUS PLATYPTERUS 011001 AREA- GULF SITE- L5 LIVER

LENGTH NUM 1 MEAN 1.700 S. D. 0.000 LOW 1.700 HIGH 1.700
WEIGHT NUM 1 MEAN 21.565 S. D. 0.000 LOW 21.565 HIGH 21.565

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	1.780	0.500	2.990	3.200	0.670	0.030	0.060	6.500	17.50	0.170	0.220	0.000	0.440	0.560	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	1.780	0.500	2.990	3.200	0.670	0.030	0.060	6.500	17.50	0.170	0.220	0.000	0.440	0.560	0.000

MARLIN, BLUE MAKAIRA NIGRICANS 011002 AREA- NORTH ATLANTIC SITE- R9 MUSCLE

LENGTH NUM 4 MEAN 2.288 S. D. 0.178 LOW 2.030 HIGH 2.440
WEIGHT NUM 4 MEAN 106.350 S. D. 19.936 LOW 77.634 HIGH 122.580

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0003
N DET.	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000	0004	0004	0000	0000	0000
MEAN	1.643	0.255	0.073	3.116	1.156	0.028	0.131	0.133	5.50	0.095	0.000	0.000	0.089	0.358	0.342
S. D.	0.499	0.069	0.015	1.669	0.267	0.004	0.120	0.153	0.63	0.047	0.000	0.000	0.002	0.062	0.033
LOW	1.280	0.160	0.060	1.600	0.865	0.025	0.060	0.040	4.81	0.050	0.000	0.000	0.085	0.310	0.310
HIGH	2.380	0.310	0.090	5.500	1.500	0.030	0.310	0.360	6.25	0.160	0.000	0.000	0.090	0.440	0.375

MARLIN, BLUE MAKAIRA NIGRICANS 011002 AREA- SOUTH ATLANTIC SITE- B5 MUSCLE

LENGTH NUM 1 MEAN 2.340 S. D. 0.000 LOW 2.340 HIGH 2.340
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	3.775	0.215	0.070	2.700	1.990	0.040	0.060	0.360	5.84	0.125	0.000	0.000	0.080	0.500	0.460
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	3.775	0.215	0.070	2.700	1.990	0.040	0.060	0.360	5.84	0.125	0.000	0.000	0.080	0.500	0.460

MARLIN, BLUE MAKAIRA NIGRICANS 011002 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH NUM 4 MEAN 3.550 S. D. 0.084 LOW 3.454 HIGH 3.658
WEIGHT NUM 9 MEAN 167.630 S. D. 47.998 LOW 72.576 HIGH 215.800

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0008	0009	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010
N DET.	0000	0002	0002	0000	0000	0005	0000	0000	0000	0002	0009	0007	0001	0003	0001
MEAN	9.453	0.416	0.071	2.731	2.423	0.052	0.131	0.323	8.78	0.258	0.370	0.577	0.107	0.830	0.429
S. D.	10.565	0.206	0.062	2.073	1.246	0.054	0.076	0.174	2.91	0.255	0.000	0.584	0.047	0.418	0.160
LOW	0.865	0.180	0.020	0.913	0.815	0.010	0.040	0.110	5.50	0.040	0.000	0.200	0.055	0.300	0.260
HIGH	37.800	0.750	0.210	7.300	4.950	0.140	0.287	0.710	13.57	0.780	0.370	1.250	0.210	1.430	0.690

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

MARLIN, BLUE MAKAIRA NIGRICANS 011002 AREA- SOUTH ATLANTIC SITE- C2 LIVER

LENGTH NUM 2 MEAN 3.505 S. D. 0.072 LOW 3.454 HIGH 3.556
WEIGHT NUM 2 MEAN 186.883 S. D. 7.698 LOW 181.440 HIGH 192.326

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0001	0000
MEAN	5.675	0.645	0.905	2.763	13.375	0.028	0.170	1.433	210.50	9.255	0.000	0.222	0.265	1.000	0.630
S. D.	0.926	0.148	0.290	0.301	2.581	0.004	0.113	1.050	135.90	12.537	0.000	0.000	0.191	0.000	0.000
LOW	5.020	0.540	0.700	2.550	11.550	0.025	0.090	0.690	114.40	0.390	0.000	0.000	0.130	0.000	0.000
HIGH	6.330	0.750	1.110	2.975	15.200	0.030	0.250	2.175	306.59	18.120	0.000	0.222	0.400	1.000	0.630

MARLIN, BLUE MAKAIRA NIGRICANS 011002 AREA- SOUTH ATLANTIC SITE- M1 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 2 MEAN 85.080 S. D. 24.013 LOW 68.100 HIGH 102.060

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0001	0000	0001	0000	0000	0000	0000	0001	0003	0000	0000	0000
MEAN	1.162	0.312	0.077	1.595	1.390	0.018	0.057	0.248	5.44	0.137	0.235	0.000	0.120	0.522	0.417
S. D.	0.906	0.105	0.021	0.460	0.051	0.011	0.006	0.085	1.28	0.034	0.191	0.000	0.010	0.115	0.216
LOW	0.120	0.190	0.060	1.270	1.335	0.010	0.050	0.150	4.00	0.110	0.100	0.000	0.110	0.395	0.190
HIGH	1.765	0.375	0.100	1.920	1.435	0.025	0.060	0.305	6.47	0.175	0.370	0.000	0.130	0.620	0.620

MARLIN, BLUE MAKAIRA NIGRICANS 011002 AREA- SOUTH ATLANTIC SITE- M1 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 2 MEAN 85.080 S. D. 24.013 LOW 68.100 HIGH 102.060

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0002	0000	0000	0000
MEAN	6.857	0.530	11.405	1.113	2.500	0.020	1.220	7.840	59.38	0.740	0.595	0.000	1.290	0.455	0.625
S. D.	4.500	0.226	5.961	0.230	0.000	0.000	1.287	5.968	22.10	0.707	0.049	0.000	0.240	0.021	0.092
LOW	2.070	0.370	7.190	0.950	0.000	0.000	0.310	3.620	43.75	0.240	0.560	0.000	1.120	0.440	0.560
HIGH	11.000	0.690	15.620	1.275	2.500	0.020	2.130	12.060	75.00	1.240	0.630	0.000	1.460	0.470	0.690

MARLIN, BLUE MAKAIRA NIGRICANS 011002 AREA- SOUTH ATLANTIC SITE- M4 MUSCLE

LENGTH NUM 1 MEAN 2.530 S. D. 0.000 LOW 2.530 HIGH 2.530
WEIGHT NUM 1 MEAN 150.728 S. D. 0.000 LOW 150.728 HIGH 150.728

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	3.650	0.160	0.080	5.150	1.700	0.000	0.060	0.070	6.88	0.090	0.000	0.000	0.140	0.560	0.560
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	3.650	0.160	0.080	5.150	1.700	0.000	0.060	0.070	6.88	0.090	0.000	0.000	0.140	0.560	0.560

MARLIN, BLUE MAKAIRA NIGRICANS 011002 AREA- HAWAII SITE- D5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 4 MEAN 100.788 S. D. 15.033 LOW 89.890 HIGH 123.030

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0003	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0004	0000	0001	0000
MEAN	1.785	0.321	0.109	1.910	1.230	0.026	0.120	0.459	4.49	0.155	0.120	0.000	0.089	0.357	0.549
S. D.	0.421	0.066	0.034	1.444	0.382	0.007	0.028	0.356	1.08	0.103	0.000	0.000	0.028	0.040	0.116
LOW	1.370	0.250	0.080	0.550	0.780	0.015	0.090	0.110	3.50	0.040	0.000	0.000	0.070	0.310	0.440
HIGH	2.200	0.410	0.145	3.833	1.713	0.030	0.145	0.875	5.75	0.290	0.120	0.000	0.130	0.380	0.690

MARLIN, BLUE MAKAIRA NIGRICANS 011002 AREA- HAWAII SITE- H4 MUSCLE

LENGTH NUM 8 MEAN 2.512 S. D. 0.429 LOW 2.250 HIGH 3.550
WEIGHT NUM 8 MEAN 103.824 S. D. 73.614 LOW 61.236 HIGH 283.500

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0007	0007	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0000	0001	0002	0000	0000	0002	0000	0000	0000	0000	0007	0005	0001	0001	0001
MEAN	2.776	0.404	0.144	3.563	2.216	0.052	0.171	0.220	5.97	0.341	0.440	0.403	0.120	0.781	0.468
S. D.	2.075	0.105	0.097	2.517	1.193	0.043	0.096	0.087	3.39	0.234	0.000	0.337	0.039	0.459	0.171
LOW	0.130	0.295	0.070	0.700	0.940	0.010	0.040	0.110	2.45	0.050	0.000	0.130	0.060	0.250	0.350
HIGH	6.565	0.575	0.300	7.300	4.000	0.130	0.295	0.350	13.57	0.700	0.440	0.780	0.160	1.500	0.845

MARLIN, BLUE MAKAIRA NIGRICANS 011002 AREA- HAWAII SITE- H4 LIVER

LENGTH NUM 5 MEAN 2.626 S. D. 0.526 LOW 2.251 HIGH 3.550
WEIGHT NUM 5 MEAN 122.291 S. D. 91.348 LOW 61.236 HIGH 283.500

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0005	0005	0004	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0004
N DET.	0000	0000	0000	0001	0000	0000	0001	0000	0000	0001	0000	0002	0000	0002	0000
MEAN	10.294	0.760	17.781	4.647	10.001	0.094	0.265	17.164	43.41	0.395	0.462	0.438	1.674	1.177	0.433
S. D.	6.801	0.392	8.809	1.629	10.218	0.067	0.037	7.974	35.95	0.195	0.292	0.078	0.857	0.887	0.109
LOW	4.530	0.250	2.740	3.180	3.155	0.010	0.210	4.940	7.50	0.110	0.160	0.350	0.440	0.630	0.330
HIGH	19.800	1.310	24.750	6.400	25.200	0.180	0.290	26.070	98.21	0.540	0.780	0.500	2.610	2.200	0.550

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

MARLIN, BLUE   MAKAIRA NIGRICANS   011002   AREA- HAWAII   SITE- J5   MUSCLE

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 2   MEAN 91.174   S. D. 31.433   LOW 68.947   HIGH 113.400

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	5.062	0.359	0.335	1.292	2.305	0.046	0.191	0.540	6.98	0.227	0.000	0.000	0.195	0.685	0.530
S. D.	6.008	0.037	0.262	1.261	1.549	0.000	0.027	0.283	1.90	0.146	0.000	0.000	0.148	0.078	0.099
LOW	0.813	0.333	0.150	0.400	1.210	0.000	0.172	0.340	5.63	0.123	0.000	0.000	0.090	0.630	0.460
HIGH	9.310	0.385	0.520	2.183	3.400	0.046	0.210	0.740	8.32	0.330	0.000	0.000	0.300	0.740	0.600

MARLIN, BLUE   MAKAIRA NIGRICANS   011002   AREA- HAWAII   SITE- J5   LIVER

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 2   MEAN 91.174   S. D. 31.433   LOW 68.947   HIGH 113.400

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0001	0000
MEAN	2.375	0.595	4.210	3.123	4.475	0.120	0.415	7.400	74.82	0.380	0.720	0.000	1.005	1.250	1.170
S. D.	1.025	0.672	3.041	0.110	2.722	0.127	0.389	4.907	39.15	0.212	0.000	0.000	0.516	0.000	0.325
LOW	1.650	0.120	2.060	3.045	2.550	0.030	0.140	3.930	47.14	0.230	0.000	0.000	0.640	0.000	0.940
HIGH	3.100	1.070	6.360	3.200	6.400	0.210	0.690	10.870	102.50	0.530	0.720	0.000	1.370	1.250	1.400

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- NORTH ATLANTIC   SITE- M9   MUSCLE

LENGTH   NUM 21   MEAN 1.595   S. D. 0.087   LOW 1.410   HIGH 1.720
WEIGHT   NUM 21   MEAN 23.674   S. D. 3.500   LOW 17.236   HIGH 31.300

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0021	0020	0021	0021	0020	0021	0021	0021	0021	0021	0021	0021	0020
N DET.	0001	0000	0000	0000	0000	0005	0000	0000	0000	0000	0019	0020	0000	0001	0000
MEAN	0.690	0.520	0.106	3.080	0.788	0.026	0.208	0.259	6.42	0.153	0.470	0.080	0.114	0.570	0.438
S. D.	0.418	0.565	0.055	1.077	0.251	0.024	0.164	0.144	0.96	0.044	0.042	0.000	0.030	0.168	0.159
LOW	0.050	0.130	0.060	1.450	0.020	0.010	0.060	0.060	3.63	0.070	0.440	0.000	0.075	0.310	0.080
HIGH	1.730	2.560	0.280	5.000	1.320	0.110	0.630	0.510	7.88	0.230	0.500	0.080	0.190	0.940	0.795

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- NORTH ATLANTIC   SITE- R6   MUSCLE

LENGTH   NUM 1   MEAN 1.650   S. D. 0.000   LOW 1.650   HIGH 1.650
WEIGHT   NUM 1   MEAN 24.040   S. D. 0.000   LOW 24.040   HIGH 24.040

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.690	0.430	0.100	2.100	1.120	0.010	0.060	0.190	6.30	0.150	0.120	0.000	0.100	0.370	0.370
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.690	0.430	0.100	2.100	1.120	0.010	0.060	0.190	6.30	0.150	0.120	0.000	0.100	0.370	0.370

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- NORTH ATLANTIC   SITE- R9   MUSCLE

LENGTH   NUM 15   MEAN 1.984   S. D. 0.277   LOW 1.500   HIGH 2.311
WEIGHT   NUM 15   MEAN 23.300   S. D. 3.962   LOW 18.598   HIGH 31.751

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0015	0015	0015	0012	0012	0015	0015	0015	0015	0015	0015	0015	0015	0015	0014
N DET.	0000	0000	0002	0000	0000	0009	0000	0000	0000	0002	0013	0012	0001	0004	0000
MEAN	0.599	0.524	0.081	2.367	0.815	0.032	0.173	0.227	5.60	0.292	0.215	0.100	0.084	0.779	0.418
S. D.	0.378	0.220	0.031	1.153	0.273	0.012	0.096	0.107	1.90	0.221	0.219	0.000	0.032	0.469	0.343
LOW	0.160	0.200	0.040	0.180	0.500	0.010	0.020	0.060	2.62	0.050	0.060	0.100	0.030	0.250	0.010
HIGH	1.505	1.050	0.130	3.800	1.260	0.040	0.386	0.430	8.57	0.810	0.370	0.100	0.140	1.780	1.500

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- NORTH ATLANTIC   SITE- R9   LIVER

LENGTH   NUM 4   MEAN 2.191   S. D. 0.139   LOW 2.007   HIGH 2.311
WEIGHT   NUM 4   MEAN 25.798   S. D. 5.456   LOW 18.598   HIGH 31.751

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0003	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0002	0000
MEAN	0.440	0.565	4.840	3.800	6.191	0.030	0.193	10.280	56.54	0.268	0.375	0.180	0.745	0.970	1.045
S. D.	0.415	0.344	1.268	0.995	5.929	0.020	0.174	6.802	36.76	0.140	0.232	0.087	0.361	0.495	0.491
LOW	0.070	0.300	3.500	2.725	2.500	0.010	0.070	5.130	30.63	0.060	0.060	0.130	0.380	0.620	0.750
HIGH	1.020	1.030	6.020	4.800	15.000	0.050	0.440	20.300	109.38	0.370	0.620	0.280	1.230	1.320	1.780

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- SOUTH ATLANTIC   SITE- C2   MUSCLE

LENGTH   NUM 1   MEAN 1.510   S. D. 0.000   LOW 1.510   HIGH 1.510
WEIGHT   NUM 1   MEAN 19.050   S. D. 0.000   LOW 19.050   HIGH 19.050

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.290	0.380	0.000	1.550	0.780	0.000	0.130	0.420	6.19	0.170	0.000	0.000	0.110	0.630	0.360
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.290	0.380	0.000	1.550	0.780	0.000	0.130	0.420	6.19	0.170	0.000	0.000	0.110	0.630	0.360

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- SOUTH ATLANTIC   SITE- M1   MUSCLE

LENGTH NUM 3 MEAN 1.520 S. D. 0.060 LOW 1.460 HIGH 1.580
WEIGHT NUM 5 MEAN 19.505 S. D. 2.442 LOW 16.330 HIGH 22.680

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0006	0007	0007	0007	0007	0007	0007	0007
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0004	0005	0000	0001	0000
MEAN	0.731	0.415	0.122	3.080	0.895	0.038	0.095	0.318	5.93	0.195	0.493	0.203	0.098	0.714	0.663
S. D.	0.312	0.234	0.107	1.059	0.175	0.023	0.048	0.200	2.13	0.163	0.333	0.018	0.035	0.328	0.328
LOW	0.215	0.160	0.056	1.312	0.670	0.010	0.020	0.120	3.12	0.100	0.240	0.190	0.055	0.380	0.450
HIGH	1.150	0.880	0.360	4.600	1.170	0.080	0.155	0.630	9.94	0.560	0.870	0.215	0.150	1.310	1.380

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- SOUTH ATLANTIC   SITE- M1   LIVER

LENGTH NUM 2 MEAN 1.550 S. D. 0.042 LOW 1.520 HIGH 1.580
WEIGHT NUM 4 MEAN 19.845 S. D. 2.680 LOW 16.330 HIGH 22.680

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0005	0005	0003	0001	0005	0005	0005	0005	0005	0005	0005	0005	0005	0003
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	1.357	0.886	9.534	3.787	2.100	0.080	0.226	14.042	42.56	0.428	0.286	0.303	0.784	1.044	0.620
S. D.	1.212	0.301	8.143	3.530	0.000	0.059	0.306	6.493	16.59	0.288	0.102	0.086	0.142	0.380	0.485
LOW	0.260	0.500	3.100	1.625	0.000	0.030	0.040	6.080	28.13	0.190	0.160	0.190	0.630	0.390	0.060
HIGH	3.450	1.180	18.750	7.860	2.100	0.160	0.770	20.630	70.31	0.930	0.380	0.400	0.900	1.380	0.900

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- SOUTH ATLANTIC   SITE- N1   MUSCLE

LENGTH NUM 1 MEAN 1.590 S. D. 0.000 LOW 1.590 HIGH 1.590
WEIGHT NUM 1 MEAN 20.412 S. D. 0.000 LOW 20.412 HIGH 20.412

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.870	0.690	0.180	4.100	0.580	0.040	0.120	0.690	5.31	0.240	0.000	0.000	0.190	0.810	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.870	0.690	0.180	4.100	0.580	0.040	0.120	0.690	5.31	0.240	0.000	0.000	0.190	0.810	0.000

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- GULF   SITE- D6   MUSCLE

LENGTH NUM 1 MEAN 1.580 S. D. 0.000 LOW 1.580 HIGH 1.580
WEIGHT NUM 1 MEAN 19.504 S. D. 0.000 LOW 19.504 HIGH 19.504

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.500	0.810	2.610	8.250	1.470	0.060	0.180	2.000	14.25	0.250	0.000	0.090	0.250	1.380	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.500	0.810	2.610	8.250	1.470	0.060	0.180	2.000	14.25	0.250	0.000	0.090	0.250	1.380	0.000

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- GULF   SITE- D6   LIVER

LENGTH NUM 1 MEAN 1.580 S. D. 0.000 LOW 1.580 HIGH 1.580
WEIGHT NUM 1 MEAN 19.504 S. D. 0.000 LOW 19.504 HIGH 19.504

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.270	0.060	2.520	4.790	0.000	0.020	0.050	9.810	104.37	0.220	0.180	0.000	0.860	1.060	0.560
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.270	0.060	2.520	4.790	0.000	0.020	0.050	9.810	104.37	0.220	0.180	0.000	0.860	1.060	0.560

MARLIN, WHITE   TETRAPTURUS ALBIDUS   011003   AREA- GULF   SITE- E4   MUSCLE

LENGTH NUM 7 MEAN 1.674 S. D. 0.103 LOW 1.540 HIGH 1.810
WEIGHT NUM 7 MEAN 27.609 S. D. 6.265 LOW 20.870 HIGH 38.560

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0006
N DET.	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000	0007	0007	0000	0000	0000
MEAN	1.114	0.306	0.076	3.721	1.086	0.024	0.136	0.141	5.91	0.129	0.000	0.000	0.103	0.458	0.443
S. D.	0.784	0.119	0.010	2.024	0.301	0.009	0.074	0.059	0.66	0.053	0.000	0.000	0.016	0.149	0.113
LOW	0.360	0.110	0.060	1.800	0.740	0.010	0.060	0.060	5.19	0.040	0.000	0.000	0.080	0.310	0.340
HIGH	2.640	0.500	0.090	8.000	1.640	0.030	0.250	0.240	6.81	0.190	0.000	0.000	0.120	0.720	0.660

SPEARFISH, SHORTBILL   TETRAPTURUS ANGUSTIROSTRIS   011004   AREA- HAWAII   SITE- D5   MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 2 MEAN 19.479 S. D. 0.641 LOW 19.026 HIGH 19.932

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.340	0.420	0.050	2.274	0.668	0.050	0.140	0.578	6.65	0.270	0.160	0.265	0.140	0.800	0.570
S. D.	0.014	0.198	0.014	0.214	0.060	0.028	0.057	0.202	1.04	0.170	0.000	0.000	0.000	0.113	0.339
LOW	0.330	0.280	0.040	2.123	0.625	0.030	0.100	0.435	5.91	0.150	0.000	0.000	0.140	0.720	0.330
HIGH	0.350	0.560	0.060	2.425	0.710	0.070	0.180	0.720	7.38	0.390	0.160	0.265	0.140	0.880	0.810

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES: BY TISSUE AND LOCATION

SPEARFISH, SHORTBILL TETRAPTURUS ANGUSTIROSTRIS 011004 AREA- HAWAII SITE- D5 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 18.221 S. D. 0.000 LOW 18.221 HIGH 18.221

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.120	0.190	1.710	7.650	2.280	0.040	0.120	1.880	31.25	0.260	0.220	0.000	1.180	0.500	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.120	0.190	1.710	7.650	2.280	0.040	0.120	1.880	31.25	0.260	0.220	0.000	1.180	0.500	0.630

SPEARFISH, SHORTBILL TETRAPTURUS ANGUSTIROSTRIS 011004 AREA- HAWAII SITE- D6 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 3 MEAN 20.687 S. D. 3.853 LOW 16.761 HIGH 24.462

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0003	0002	0000	0000	0000
MEAN	0.287	0.460	0.037	1.312	0.640	0.050	0.127	0.417	7.36	0.143	0.000	0.190	0.113	0.503	0.530
S. D.	0.126	0.161	0.025	0.352	0.217	0.014	0.065	0.097	2.87	0.015	0.000	0.000	0.021	0.110	0.042
LOW	0.170	0.310	0.010	1.012	0.410	0.040	0.060	0.310	4.88	0.130	0.000	0.000	0.090	0.440	0.500
HIGH	0.420	0.630	0.060	1.700	0.840	0.060	0.190	0.500	10.50	0.160	0.000	0.190	0.130	0.630	0.560

SPEARFISH, SHORTBILL TETRAPTURUS ANGUSTIROSTRIS 011004 AREA- HAWAII SITE- D9 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 14.043 S. D. 0.000 LOW 14.043 HIGH 14.043

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.000	0.500	0.080	1.100	0.630	0.010	0.060	0.110	4.19	0.160	0.000	0.000	0.070	1.130	0.870
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.500	0.080	1.100	0.630	0.010	0.060	0.110	4.19	0.160	0.000	0.000	0.070	1.130	0.870

SPEARFISH, SHORTBILL TETRAPTURUS ANGUSTIROSTRIS 011004 AREA- HAWAII SITE- G5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 3 MEAN 22.095 S. D. 0.524 LOW 21.792 HIGH 22.700

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.233	0.750	0.080	3.567	1.177	0.030	0.333	0.413	6.94	0.210	0.000	0.000	0.123	0.683	0.440
S. D.	0.121	0.622	0.020	1.504	0.206	0.010	0.414	0.171	1.14	0.030	0.000	0.000	0.031	0.170	0.060
LOW	0.140	0.310	0.060	2.000	0.980	0.020	0.060	0.300	6.25	0.180	0.000	0.000	0.090	0.490	0.380
HIGH	0.370	1.190	0.100	5.000	1.390	0.040	0.810	0.610	8.25	0.240	0.000	0.000	0.150	0.810	0.500

SPEARFISH, SHORTBILL TETRAPTURUS ANGUSTIROSTRIS 011004 AREA- HAWAII SITE- G5 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 3 MEAN 22.095 S. D. 0.524 LOW 21.792 HIGH 22.700

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0002	0003	0000	0002	0000
MEAN	0.143	0.523	1.563	5.950	4.307	0.027	0.440	6.367	33.36	0.190	0.190	0.000	0.983	0.630	1.080
S. D.	0.121	0.526	0.927	3.606	2.096	0.015	0.271	2.107	7.40	0.053	0.000	0.000	0.307	0.000	0.589
LOW	0.050	0.190	0.500	3.400	1.920	0.010	0.130	4.750	28.50	0.130	0.000	0.000	0.700	0.000	0.440
HIGH	0.280	1.130	2.200	8.500	5.850	0.040	0.630	8.750	41.88	0.230	0.190	0.000	1.310	0.630	1.600

SPEARFISH, SHORTBILL TETRAPTURUS ANGUSTIROSTRIS 011004 AREA- HAWAII SITE- H2 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 2 MEAN 13.847 S. D. 0.963 LOW 13.166 HIGH 14.528

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.293	0.145	0.058	1.683	0.710	0.020	0.268	0.820	6.67	0.220	0.000	0.000	0.093	0.470	0.508
S. D.	0.124	0.021	0.004	0.683	0.141	0.000	0.110	0.014	0.74	0.000	0.000	0.000	0.018	0.311	0.074
LOW	0.205	0.130	0.055	1.200	0.610	0.020	0.190	0.810	6.15	0.220	0.000	0.000	0.080	0.250	0.455
HIGH	0.380	0.160	0.060	2.166	0.810	0.020	0.345	0.830	7.19	0.220	0.000	0.000	0.105	0.690	0.560

SPEARFISH, SHORTBILL TETRAPTURUS ANGUSTIROSTRIS 011004 AREA- HAWAII SITE- H6 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 21.291 S. D. 0.000 LOW 21.291 HIGH 21.291

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.165	0.495	0.060	2.600	0.670	0.040	0.010	0.155	3.95	0.120	0.120	0.000	0.115	0.590	0.390
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.165	0.495	0.060	2.600	0.670	0.040	0.010	0.155	3.95	0.120	0.120	0.000	0.115	0.590	0.390

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

SPEARFISH, SHORTBILL   TETRAPTURUS ANGUSTIROSTRIS   011004   AREA- HAWAII   SITE- J5   MUSCLE

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 3   MEAN 17.063   S. D. 0.262   LOW 16.761   HIGH 17.214

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.070	0.790	0.090	1.336	0.743	0.072	0.182	0.333	6.16	0.243	0.175	0.410	0.133	0.795	0.802
S. D.	0.046	0.221	0.022	0.719	0.050	0.019	0.089	0.046	1.07	0.100	0.021	0.311	0.053	0.204	0.200
LOW	0.020	0.560	0.075	0.893	0.690	0.050	0.130	0.300	5.06	0.130	0.160	0.190	0.075	0.665	0.655
HIGH	0.110	1.000	0.115	2.166	0.790	0.085	0.285	0.365	7.19	0.320	0.190	0.630	0.180	1.030	1.030

MARLIN, STRIPED   TETRAPTURUS AUDAX   011005   AREA- HAWAII   SITE- D5   MUSCLE

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 22   MEAN 33.364   S. D. 6.540   LOW 22.246   HIGH 47.174

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0023	0023	0023	0023	0023	0023	0023	0022	0023	0023	0023	0023	0023	0023	0023
N DET.	0009	0001	0000	0000	0000	0001	0002	0000	0000	0001	0023	0023	0001	0002	0000
MEAN	1.529	0.853	0.123	2.813	0.932	0.027	0.202	0.282	4.83	0.187	0.000	0.000	0.113	0.697	0.547
S. D.	2.140	0.907	0.077	1.409	0.503	0.008	0.144	0.161	1.17	0.058	0.000	0.000	0.036	0.225	0.278
LOW	0.020	0.190	0.030	0.450	0.280	0.010	0.050	0.070	2.75	0.080	0.000	0.000	0.070	0.380	0.310
HIGH	5.200	3.380	0.280	6.100	2.250	0.040	0.630	0.630	7.44	0.285	0.000	0.000	0.220	1.130	1.470

MARLIN, STRIPED   TETRAPTURUS AUDAX   011005   AREA- HAWAII   SITE- D5   LIVER

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 1   MEAN 22.246   S. D. 0.000   LOW 22.246   HIGH 22.246

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	2.440	1.720	1.500	2.250	0.030	0.250	2.340	19.81	0.090	0.250	0.000	0.850	0.470	0.550
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	2.440	1.720	1.500	2.250	0.030	0.250	2.340	19.81	0.090	0.250	0.000	0.850	0.470	0.550

MARLIN, STRIPED   TETRAPTURUS AUDAX   011005   AREA- HAWAII   SITE- D8   MUSCLE

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 4   MEAN 38.215   S. D. 3.560   LOW 34.927   HIGH 41.731

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0001	0000	0000	0000	0000	0000	0000	0001	0002	0001	0000	0000	0000
MEAN	0.516	0.325	0.037	2.193	0.883	0.105	0.235	0.415	5.53	0.200	0.365	1.073	0.095	0.445	0.470
S. D.	0.170	0.293	0.012	0.294	0.148	0.097	0.173	0.133	2.25	0.135	0.474	0.467	0.070	0.192	0.134
LOW	0.345	0.050	0.030	1.821	0.725	0.010	0.080	0.235	3.56	0.070	0.030	0.630	0.030	0.190	0.345
HIGH	0.715	0.678	0.050	2.540	1.060	0.220	0.433	0.556	8.77	0.340	0.700	1.560	0.185	0.650	0.645

MARLIN, STRIPED   TETRAPTURUS AUDAX   011005   AREA- HAWAII   SITE- D8   LIVER

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 3   MEAN 37.346   S. D. 3.804   LOW 34.927   HIGH 41.731

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0002	0002	0003	0003	0003	0003	0003	0003	0002
N DET.	0000	0001	0000	0000	0000	0000	0000	0000	0000	0001	0001	0002	0000	0001	0000
MEAN	0.203	0.405	5.653	2.735	2.290	0.070	0.105	12.335	71.90	0.285	0.660	1.250	1.250	1.280	1.035
S. D.	0.222	0.219	5.606	1.867	0.891	0.030	0.049	1.365	48.76	0.007	0.651	0.000	0.365	0.127	0.474
LOW	0.070	0.250	2.020	0.750	1.420	0.040	0.070	11.370	23.75	0.280	0.200	0.000	0.880	1.190	0.700
HIGH	0.460	0.560	12.110	4.455	3.200	0.100	0.140	13.300	121.25	0.290	1.120	1.250	1.610	1.370	1.370

MARLIN, STRIPED   TETRAPTURUS AUDAX   011005   AREA- HAWAII   SITE- G5   MUSCLE

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 1   MEAN 16.344   S. D. 0.000   LOW 16.344   HIGH 16.344

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.060	1.310	0.150	4.500	1.270	0.020	0.690	0.230	5.31	0.230	0.000	0.000	0.140	1.000	0.560
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.060	1.310	0.150	4.500	1.270	0.020	0.690	0.230	5.31	0.230	0.000	0.000	0.140	1.000	0.560

MARLIN, STRIPED   TETRAPTURUS AUDAX   011005   AREA- HAWAII   SITE- G5   LIVER

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 1   MEAN 16.344   S. D. 0.000   LOW 16.344   HIGH 16.344

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.000	1.250	2.060	6.240	2.000	0.050	0.190	3.770	32.81	0.230	0.000	0.000	0.710	1.250	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	1.250	2.060	6.240	2.000	0.050	0.190	3.770	32.81	0.230	0.000	0.000	0.710	1.250	0.380

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

MARLIN, STRIPED   TETRAPTURUS AUDAX   011005   AREA- HAWAII   SITE- H2   MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 9 MEAN 28.047 S. D. 6.918 LOW 18.614 HIGH 40.406

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0008	0009	0009	0009	0009	0008	0008	0009	0009	0009	0009	0009	0009	0008
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0009	0000	0001	0000
MEAN	2.497	0.581	0.140	3.241	1.420	0.022	0.243	0.298	4.29	0.178	0.000	0.000	0.088	0.623	0.451
S. D.	2.403	0.557	0.053	3.751	0.831	0.010	0.243	0.209	1.50	0.068	0.000	0.000	0.039	0.242	0.214
LOW	0.070	0.190	0.080	0.970	0.550	0.010	0.050	0.080	2.63	0.090	0.000	0.000	0.020	0.310	0.190
HIGH	5.670	1.940	0.220	13.000	3.100	0.040	0.690	0.630	6.50	0.290	0.000	0.000	0.160	0.940	0.910

MARLIN, STRIPED   TETRAPTURUS AUDAX   011005   AREA- HAWAII   SITE- H2   LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 2 MEAN 22.927 S. D. 2.247 LOW 21.338 HIGH 24.516

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	0.050	0.910	2.380	5.325	3.018	0.030	0.220	3.845	46.10	0.245	0.305	0.250	1.440	1.000	0.655
S. D.	0.014	1.103	0.085	0.884	1.036	0.014	0.042	4.151	7.73	0.064	0.148	0.000	0.622	0.000	0.134
LOW	0.040	0.130	2.320	4.700	2.285	0.020	0.190	0.910	40.63	0.200	0.200	0.000	1.000	0.000	0.560
HIGH	0.060	1.690	2.440	5.950	3.750	0.040	0.250	6.780	51.56	0.290	0.410	0.250	1.880	1.000	0.750

MARLIN, STRIPED   TETRAPTURUS AUDAX   011005   AREA- HAWAII   SITE- H6   MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 3 MEAN 42.033 S. D. 3.666 LOW 39.916 HIGH 46.266

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0001	0002	0000	0000	0003	0001	0001	0000	0001	0003	0003	0000	0002	0000
MEAN	0.370	0.843	0.070	3.117	0.827	0.000	0.098	0.485	7.90	0.195	0.000	0.000	0.107	0.360	0.420
S. D.	0.070	1.071	0.000	1.460	0.273	0.000	0.074	0.078	3.54	0.078	0.000	0.000	0.035	0.000	0.036
LOW	0.320	0.085	0.000	1.940	0.580	0.000	0.045	0.430	3.93	0.140	0.000	0.000	0.070	0.000	0.380
HIGH	0.450	1.600	0.070	4.750	1.120	0.000	0.150	0.540	10.71	0.250	0.000	0.000	0.140	0.360	0.450

MARLIN, STRIPED   TETRAPTURUS AUDAX   011005   AREA- HAWAII   SITE- H6   LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 2 MEAN 43.092 S. D. 4.490 LOW 39.917 HIGH 46.267

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	0.195	0.360	7.640	2.875	4.100	0.025	0.080	12.360	78.10	0.235	0.650	0.620	1.085	0.810	0.505
S. D.	0.049	0.000	8.047	0.000	0.000	0.021	0.028	0.198	48.65	0.134	0.665	0.000	0.771	0.000	0.078
LOW	0.160	0.000	1.950	0.000	0.000	0.010	0.060	12.220	43.70	0.140	0.180	0.000	0.540	0.000	0.450
HIGH	0.230	0.360	13.330	2.875	4.100	0.040	0.100	12.500	112.50	0.330	1.120	0.620	1.630	0.810	0.560

BLUEFISH   POMATOMUS SALTATRIX   012001   AREA- NORTH ATLANTIC   SITE- N2   MUSCLE

LENGTH NUM 14 MEAN 0.617 S. D. 0.040 LOW 0.557 HIGH 0.698
WEIGHT NUM 14 MEAN 2.860 S. D. 0.403 LOW 2.268 HIGH 3.799

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014
N DET.	0000	0001	0003	0000	0000	0005	0000	0000	0000	0002	0010	0009	0000	0003	0000
MEAN	0.277	0.769	0.071	2.902	0.958	0.027	0.152	0.590	12.35	0.195	0.373	0.262	0.157	0.664	0.456
S. D.	0.163	0.903	0.035	1.444	0.556	0.020	0.130	0.163	4.36	0.095	0.342	0.176	0.056	0.232	0.139
LOW	0.110	0.175	0.020	1.500	0.400	0.010	0.020	0.230	8.09	0.060	0.090	0.060	0.095	0.280	0.220
HIGH	0.690	2.810	0.140	7.200	2.500	0.070	0.435	0.840	23.75	0.360	0.870	0.440	0.300	1.060	0.690

BLUEFISH   POMATOMUS SALTATRIX   012001   AREA- NORTH ATLANTIC   SITE- N2   LIVER

LENGTH NUM 1 MEAN 0.611 S. D. 0.000 LOW 0.611 HIGH 0.611
WEIGHT NUM 1 MEAN 0.826 S. D. 0.000 LOW 0.826 HIGH 0.826

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.260	0.310	0.210	4.153	3.040	0.020	0.060	6.440	61.25	0.220	1.310	0.120	0.960	0.620	0.620
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.260	0.310	0.210	4.153	3.040	0.020	0.060	6.440	61.25	0.220	1.310	0.120	0.960	0.620	0.620

BLUEFISH   POMATOMUS SALTATRIX   012001   AREA- NORTH ATLANTIC   SITE- N4   MUSCLE

LENGTH NUM 10 MEAN 0.438 S. D. 0.014 LOW 0.415 HIGH 0.454
WEIGHT NUM 10 MEAN 0.823 S. D. 0.086 LOW 0.679 HIGH 0.953

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0003	0000	0000	0003	0000	0000	0000	0001	0007	0008	0000	0004	0000
MEAN	0.134	0.406	0.061	2.215	0.792	0.032	0.239	0.425	6.09	0.225	0.583	0.315	0.139	0.520	0.606
S. D.	0.026	0.182	0.035	1.130	0.246	0.020	0.114	0.219	2.06	0.109	0.374	0.078	0.096	0.311	0.239
LOW	0.095	0.190	0.020	0.850	0.445	0.010	0.110	0.130	2.94	0.080	0.160	0.260	0.060	0.060	0.425
HIGH	0.170	0.750	0.110	4.500	1.190	0.070	0.440	0.890	9.44	0.375	0.870	0.370	0.340	0.765	1.200

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES: BY TISSUE AND LOCATION

LOCATION LEVEL 5

BLUEFISH   POMATOMUS SALTATRIX   012001   AREA- NORTH ATLANTIC   SITE- N4   LIVER

LENGTH NUM 1 MEAN 0.438 S. D. 0.000 LOW 0.438 HIGH 0.438
WEIGHT NUM 1 MEAN 0.823 S. D. 0.000 LOW 0.823 HIGH 0.823

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.130	0.560	0.140	1.050	2.280	0.040	0.130	2.500	16.00	0.260	0.250	0.000	0.890	0.380	0.690
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.130	0.560	0.140	1.050	2.280	0.040	0.130	2.500	16.00	0.260	0.250	0.000	0.890	0.380	0.690

BLUEFISH   POMATOMUS SALTATRIX   012001   AREA- NORTH ATLANTIC   SITE- N5   MUSCLE

LENGTH NUM 2 MEAN 0.655 S. D. 0.134 LOW 0.560 HIGH 0.750
WEIGHT NUM 2 MEAN 3.405 S. D. 1.605 LOW 2.270 HIGH 4.540

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0001	0000	0001	0000
MEAN	0.495	0.300	0.060	2.343	0.740	0.030	0.375	0.165	8.00	0.165	0.000	0.090	0.145	0.560	0.535
S. D.	0.530	0.014	0.000	0.951	0.622	0.000	0.445	0.163	3.97	0.035	0.000	0.000	0.021	0.000	0.177
LOW	0.120	0.290	0.060	1.670	0.300	0.000	0.060	0.050	5.19	0.140	0.000	0.000	0.130	0.000	0.410
HIGH	0.870	0.310	0.060	3.015	1.180	0.030	0.690	0.280	10.80	0.190	0.000	0.090	0.160	0.560	0.660

BLUEFISH   POMATOMUS SALTATRIX   012001   AREA- NORTH ATLANTIC   SITE- R3   MUSCLE

LENGTH NUM 2 MEAN 0.253 S. D. 0.095 LOW 0.185 HIGH 0.320
WEIGHT NUM 2 MEAN 0.312 S. D. 0.313 LOW 0.090 HIGH 0.533

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0002	0000
MEAN	0.110	0.313	0.058	2.182	1.070	0.025	0.160	0.438	4.96	0.235	0.090	0.000	0.118	0.000	0.495
S. D.	0.000	0.088	0.011	1.158	0.495	0.007	0.042	0.074	0.11	0.007	0.000	0.000	0.011	0.000	0.035
LOW	0.000	0.250	0.050	1.363	0.720	0.020	0.130	0.385	4.88	0.230	0.000	0.000	0.110	0.000	0.470
HIGH	0.110	0.375	0.065	3.000	1.420	0.030	0.190	0.490	5.03	0.240	0.090	0.000	0.125	0.000	0.520

BLUEFISH   POMATOMUS SALTATRIX   012001   AREA- NORTH ATLANTIC   SITE- R6   MUSCLE

LENGTH NUM 1 MEAN 0.278 S. D. 0.000 LOW 0.278 HIGH 0.278
WEIGHT NUM 1 MEAN 0.340 S. D. 0.000 LOW 0.340 HIGH 0.340

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.020	0.500	0.060	2.450	0.550	0.010	0.060	0.460	4.38	0.310	0.000	0.000	0.170	0.000	0.530
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.500	0.060	2.450	0.550	0.010	0.060	0.460	4.38	0.310	0.000	0.000	0.170	0.000	0.530

BLUEFISH   POMATOMUS SALTATRIX   012001   AREA- NORTH ATLANTIC   SITE- R8   MUSCLE

LENGTH NUM 10 MEAN 0.366 S. D. 0.000 LOW 0.366 HIGH 0.366
WEIGHT NUM 10 MEAN 0.460 S. D. 0.000 LOW 0.460 HIGH 0.460

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0009	0009	0009	0009	0010	0010	0010
N DET.	0000	0000	0004	0001	0000	0003	0001	0000	0000	0001	0007	0007	0000	0001	0000
MEAN	0.213	0.389	0.037	1.327	0.799	0.059	0.205	0.388	5.74	0.202	0.250	0.815	0.170	0.873	0.483
S. D.	0.034	0.234	0.008	0.518	0.223	0.050	0.150	0.152	0.79	0.136	0.141	0.445	0.096	0.573	0.186
LOW	0.155	0.150	0.030	0.700	0.450	0.010	0.050	0.040	4.50	0.040	0.150	0.500	0.070	0.180	0.290
HIGH	0.290	0.880	0.050	2.400	1.130	0.140	0.500	0.605	7.14	0.390	0.350	1.130	0.415	1.850	0.750

BLUEFISH   POMATOMUS SALTATRIX   012001   AREA- NORTH ATLANTIC   SITE- R9   MUSCLE

LENGTH NUM 2 MEAN 0.454 S. D. 0.355 LOW 0.203 HIGH 0.705
WEIGHT NUM 2 MEAN 1.759 S. D. 2.329 LOW 0.112 HIGH 3.405

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.690	0.500	0.058	1.898	0.633	0.030	0.083	0.528	9.99	0.203	0.000	0.000	0.145	0.470	0.368
S. D.	0.799	0.042	0.011	0.350	0.180	0.000	0.032	0.117	7.22	0.046	0.000	0.000	0.007	0.000	0.011
LOW	0.125	0.470	0.050	1.650	0.505	0.000	0.060	0.445	4.88	0.170	0.000	0.000	0.140	0.000	0.360
HIGH	1.255	0.530	0.065	2.145	0.760	0.030	0.105	0.610	15.09	0.235	0.000	0.000	0.150	0.470	0.375

BLUEFISH   POMATOMUS SALTATRIX   012001   AREA- SOUTH ATLANTIC   SITE- B6   MUSCLE

LENGTH NUM 10 MEAN 0.260 S. D. 0.000 LOW 0.260 HIGH 0.260
WEIGHT NUM 10 MEAN 0.340 S. D. 0.000 LOW 0.340 HIGH 0.340

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0003	0000	0000	0004	0000	0000	0000	0002	0007	0008	0000	0003	0000
MEAN	0.109	0.859	0.075	2.082	1.014	0.028	0.152	0.635	6.11	0.241	0.750	0.390	0.151	0.606	0.457
S. D.	0.039	0.634	0.035	0.963	0.686	0.012	0.074	0.178	1.45	0.151	0.570	0.325	0.066	0.291	0.139
LOW	0.020	0.120	0.040	0.580	0.520	0.010	0.070	0.330	3.06	0.070	0.130	0.160	0.070	0.350	0.350
HIGH	0.155	2.250	0.120	3.500	2.805	0.040	0.310	0.890	8.44	0.570	1.250	0.620	0.290	1.190	0.750

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

BLUEFISH POMATOMUS SALTATRIX 012001 AREA- SOUTH ATLANTIC SITE- F6 MUSCLE

LENGTH NUM 2 MEAN 0.282 S. D. 0.003 LOW 0.280 HIGH 0.284
WEIGHT NUM 2 MEAN 0.285 S. D. 0.000 LOW 0.285 HIGH 0.285

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0001	0000	0000	0001	0001	0002	0000	0000	0000
MEAN	0.203	0.145	0.085	2.713	0.985	0.020	0.050	0.373	5.10	0.490	0.250	0.000	0.123	1.010	0.390
S. D.	0.011	0.148	0.035	1.290	0.219	0.000	0.000	0.124	2.38	0.000	0.000	0.000	0.018	0.990	0.085
LOW	0.195	0.040	0.060	1.800	0.830	0.000	0.000	0.285	3.41	0.000	0.000	0.000	0.110	0.310	0.330
HIGH	0.210	0.250	0.110	3.625	1.140	0.020	0.050	0.460	6.78	0.490	0.250	0.000	0.135	1.710	0.450

BLUEFISH POMATOMUS SALTATRIX 012001 AREA- GULF SITE- E5 MUSCLE

LENGTH NUM 20 MEAN 0.431 S. D. 0.037 LOW 0.397 HIGH 0.509
WEIGHT NUM 20 MEAN 0.804 S. D. 0.249 LOW 0.577 HIGH 1.335

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0018	0018	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0000	0000	0002	0000	0000	0007	0001	0000	0000	0000	0016	0016	0000	0003	0000
MEAN	0.536	0.401	0.056	2.499	0.976	0.035	0.141	0.448	7.50	0.224	0.388	0.170	0.164	0.708	0.560
S. D.	0.148	0.175	0.020	1.008	0.241	0.012	0.091	0.161	2.19	0.063	0.370	0.107	0.052	0.539	0.299
LOW	0.370	0.190	0.010	0.320	0.550	0.020	0.030	0.140	0.63	0.110	0.060	0.060	0.100	0.120	0.253
HIGH	0.945	0.770	0.100	4.150	1.450	0.065	0.380	0.710	10.63	0.390	0.870	0.310	0.290	2.190	1.470

BLUEFISH POMATOMUS SALTATRIX 012001 AREA- GULF SITE- E5 LIVER

LENGTH NUM 2 MEAN 0.430 S. D. 0.035 LOW 0.405 HIGH 0.454
WEIGHT NUM 2 MEAN 0.795 S. D. 0.238 LOW 0.626 HIGH 0.963

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	1.010	0.708	0.210	4.275	2.490	0.040	0.305	5.115	86.31	0.183	0.473	1.630	1.048	1.103	1.445
S. D.	0.255	0.053	0.099	1.662	0.014	0.000	0.276	1.831	8.25	0.004	0.223	0.000	0.187	0.746	1.492
LOW	0.830	0.670	0.140	3.100	2.480	0.000	0.110	3.820	80.47	0.180	0.315	0.000	0.915	0.575	0.390
HIGH	1.190	0.745	0.280	5.450	2.500	0.040	0.500	6.410	92.14	0.185	0.630	1.630	1.180	1.630	2.500

HARVESTFISH PEPRILUS ALEPIDOTUS 018011 AREA- NORTH ATLANTIC SITE- R9 WHOLE

LENGTH NUM 16 MEAN 0.089 S. D. 0.003 LOW 0.083 HIGH 0.097
WEIGHT NUM 16 MEAN 0.030 S. D. 0.002 LOW 0.028 HIGH 0.036

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0016	0015	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016
N DET.	0015	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0014	0000
MEAN	0.160	0.845	0.123	3.341	1.018	0.089	0.323	0.421	15.97	0.404	0.199	0.248	1.497	0.175	1.129
S. D.	0.000	0.229	0.022	1.054	0.315	0.016	0.118	0.154	1.21	0.087	0.050	0.090	0.646	0.064	0.260
LOW	0.000	0.500	0.080	2.250	0.620	0.060	0.130	0.160	13.13	0.220	0.130	0.130	0.160	0.130	0.750
HIGH	0.160	1.190	0.180	5.600	1.950	0.115	0.500	0.690	17.38	0.510	0.310	0.410	2.230	0.220	1.630

HARVESTFISH PEPRILUS ALEPIDOTUS 018011 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH NUM 1 MEAN 0.154 S. D. 0.000 LOW 0.154 HIGH 0.154
WEIGHT NUM 1 MEAN 0.143 S. D. 0.000 LOW 0.143 HIGH 0.143

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.040	0.190	0.070	0.565	0.920	0.030	0.250	0.260	5.88	0.250	0.000	0.000	0.190	0.000	0.470
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.040	0.190	0.070	0.565	0.920	0.030	0.250	0.260	5.88	0.250	0.000	0.000	0.190	0.000	0.470

HARVESTFISH PEPRILUS ALEPIDOTUS 018011 AREA- SOUTH ATLANTIC SITE- F6 MUSCLE

LENGTH NUM 2 MEAN 0.162 S. D. 0.009 LOW 0.155 HIGH 0.168
WEIGHT NUM 2 MEAN 0.202 S. D. 0.093 LOW 0.136 HIGH 0.267

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.118	0.268	0.073	7.125	0.775	0.000	0.065	0.285	8.26	0.313	0.000	0.000	0.163	0.850	0.513
S. D.	0.124	0.103	0.046	1.768	0.028	0.000	0.007	0.028	2.84	0.067	0.000	0.000	0.124	0.566	0.159
LOW	0.030	0.195	0.040	5.875	0.755	0.000	0.060	0.265	6.25	0.265	0.000	0.000	0.075	0.450	0.400
HIGH	0.205	0.340	0.105	8.375	0.795	0.000	0.070	0.305	10.26	0.360	0.000	0.000	0.250	1.250	0.625

BUTTERFISH PEPRILUS TRIACANTHUS 018014 AREA- NORTH ATLANTIC SITE- M8 MUSCLE

LENGTH NUM 6 MEAN 0.156 S. D. 0.011 LOW 0.142 HIGH 0.170
WEIGHT NUM 6 MEAN 0.144 S. D. 0.098 LOW 0.074 HIGH 0.333

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0002	0001	0001	0000	0000	0003	0000	0000	0000	0002	0003	0005	0000	0004	0000
MEAN	0.039	0.332	0.066	3.367	0.654	0.037	0.161	0.489	6.10	0.189	0.347	0.260	0.218	0.898	0.480
S. D.	0.022	0.145	0.019	2.236	0.162	0.006	0.170	0.111	1.55	0.037	0.454	0.000	0.102	0.011	0.207
LOW	0.020	0.150	0.040	1.066	0.490	0.030	0.050	0.330	4.28	0.140	0.060	0.000	0.030	0.890	0.250
HIGH	0.060	0.530	0.090	5.840	0.950	0.040	0.500	0.610	8.52	0.225	0.870	0.260	0.290	0.905	0.800

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                                     TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   MF11
                                    IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                    BY TISSUE AND LOCATION

BUTTERFISH                    PEPRILUS TRIACANTHUS                018014   AREA- NORTH ATLANTIC     SITE- M9   WHOLE

LENGTH     NUM    7   MEAN        0.118   S. D.     0.002   LOW       0.116   HIGH       0.121
WEIGHT     NUM    7   MEAN        0.035   S. D.     0.002   LOW       0.033   HIGH       0.039
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0007    0007    0007    0007    0007    0007    0007    0007    0007    0007     0007    0007    0007    0007    0007
N DET.    0001    0000    0000    0000    0000    0000    0000    0000    0000    0000     0006    0007    0000    0007    0000
MEAN     0.053   0.424   0.081   1.553   0.719   0.036   0.329   0.353    7.18   0.282    0.170   0.000   0.316   0.000   0.547
S. D.    0.026   0.084   0.011   0.905   0.215   0.013   0.114   0.131    0.87   0.068    0.000   0.000   0.050   0.000   0.059
LOW      0.020   0.310   0.060   0.425   0.550   0.010   0.190   0.140    6.22   0.200    0.000   0.000   0.240   0.000   0.500
HIGH     0.100   0.560   0.095   3.000   1.145   0.050   0.535   0.495    8.44   0.370    0.170   0.000   0.390   0.000   0.630

BUTTERFISH                    PEPRILUS TRIACANTHUS                018014   AREA- NORTH ATLANTIC     SITE- N2   WHOLE

LENGTH     NUM    8   MEAN        0.069   S. D.     0.009   LOW       0.063   HIGH       0.084
WEIGHT     NUM    8   MEAN        0.010   S. D.     0.008   LOW       0.004   HIGH       0.021
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0008    0008    0008    0008    0008    0008    0008    0008    0008    0008     0008    0008    0008    0008    0008
N DET.    0007    0000    0000    0000    0000    0000    0000    0000    0000    0000     0000    0000    0000    0008    0000
MEAN     0.050   0.950   0.148   1.555   0.746   0.086   0.278   0.564   12.57   0.483    0.274   0.671   2.145   0.000   1.111
S. D.    0.000   0.123   0.025   0.685   0.178   0.025   0.069   0.184    2.49   0.109    0.156   0.217   0.713   0.000   0.217
LOW      0.000   0.750   0.125   0.450   0.550   0.060   0.190   0.260    8.87   0.280    0.060   0.330   1.190   0.000   0.860
HIGH     0.050   1.130   0.190   2.500   1.105   0.130   0.375   0.765   16.25   0.580    0.580   1.000   3.130   0.000   1.440

BUTTERFISH                    PEPRILUS TRIACANTHUS                018014   AREA- NORTH ATLANTIC     SITE- N3   MUSCLE

LENGTH     NUM    3   MEAN        0.174   S. D.     0.015   LOW       0.164   HIGH       0.191
WEIGHT     NUM    3   MEAN        0.121   S. D.     0.024   LOW       0.105   HIGH       0.148
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003     0003    0003    0003    0003    0003
N DET.    0002    0000    0000    0000    0000    0000    0000    0000    0000    0000     0003    0003    0000    0001    0000
MEAN     0.060   0.293   0.053   2.113   0.507   0.027   0.257   0.613    8.25   0.150    0.000   0.000   0.140   0.645   0.780
S. D.    0.000   0.096   0.023   1.466   0.169   0.006   0.264   0.259    2.04   0.113    0.000   0.000   0.069   0.290   0.156
LOW      0.000   0.190   0.040   1.140   0.390   0.020   0.080   0.320    6.69   0.080    0.000   0.000   0.060   0.440   0.690
HIGH     0.060   0.380   0.080   3.800   0.700   0.030   0.560   0.810   10.56   0.280    0.000   0.000   0.180   0.850   0.960

BUTTERFISH                    PEPRILUS TRIACANTHUS                018014   AREA- NORTH ATLANTIC     SITE- N7   WHOLE

LENGTH     NUM    2   MEAN        0.080   S. D.     0.004   LOW       0.077   HIGH       0.082
WEIGHT     NUM    2   MEAN        0.018   S. D.     0.001   LOW       0.017   HIGH       0.018
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002     0002    0002    0002    0002    0002
N DET.    0001    0000    0000    0000    0000    0000    0000    0000    0000    0000     0000    0000    0000    0001    0000
MEAN     0.020   0.920   0.115   0.883   0.685   0.090   0.435   0.533   13.99   0.493    0.510   0.505   3.045   0.310   1.173
S. D.    0.000   0.156   0.007   0.542   0.672   0.000   0.276   0.152    0.27   0.011    0.453   0.177   0.643   0.000   0.421
LOW      0.000   0.810   0.110   0.500   0.210   0.090   0.240   0.425   13.80   0.485    0.190   0.380   2.590   0.000   0.875
HIGH     0.020   1.030   0.120   1.266   1.160   0.090   0.630   0.640   14.18   0.500    0.830   0.630   3.500   0.310   1.470

BUTTERFISH                    PEPRILUS TRIACANTHUS                018014   AREA- NORTH ATLANTIC     SITE- N8   H&G, TAILLESS

LENGTH     NUM    1   MEAN        0.109   S. D.     0.000   LOW       0.109   HIGH       0.109
WEIGHT     NUM    1   MEAN        0.025   S. D.     0.000   LOW       0.025   HIGH       0.025
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001     0001    0001    0001    0001    0001
N DET.    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000     0000    0000    0000    0000    0000
MEAN     0.250   0.897   0.117   4.990   0.790   0.130   0.357   0.822   18.58   0.330    0.233   0.735   1.465   1.563   0.966
S. D.    0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000   0.000
LOW      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000   0.000
HIGH     0.250   0.897   0.117   4.990   0.790   0.130   0.357   0.822   18.58   0.330    0.233   0.735   1.465   1.563   0.966

BUTTERFISH                    PEPRILUS TRIACANTHUS                018014   AREA- NORTH ATLANTIC     SITE- N8   MUSCLE

LENGTH     NUM   13   MEAN        0.153   S. D.     0.010   LOW       0.133   HIGH       0.174
WEIGHT     NUM   13   MEAN        0.075   S. D.     0.020   LOW       0.045   HIGH       0.112
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0013    0013    0013    0013    0013    0012    0013    0013    0013    0013     0013    0012    0013    0013    0013
N DET.    0008    0000    0000    0000    0000    0001    0000    0000    0000    0000     0009    0007    0000    0001    0000
MEAN     0.024   0.391   0.086   2.779   0.715   0.048   0.167   0.562    8.80   0.215    0.188   0.226   0.203   0.594   0.571
S. D.    0.009   0.152   0.016   1.426   0.214   0.021   0.076   0.107    1.11   0.034    0.053   0.149   0.052   0.152   0.246
LOW      0.020   0.250   0.060   1.275   0.410   0.020   0.080   0.410    6.87   0.160    0.120   0.060   0.150   0.310   0.220
HIGH     0.040   0.750   0.110   5.650   1.300   0.090   0.320   0.750   11.00   0.275    0.250   0.440   0.310   0.810   1.190

BUTTERFISH                    PEPRILUS TRIACANTHUS                018014   AREA- NORTH ATLANTIC     SITE- 01   MUSCLE

LENGTH     NUM   17   MEAN        0.173   S. D.     0.015   LOW       0.127   HIGH       0.194
WEIGHT     NUM   17   MEAN        0.114   S. D.     0.025   LOW       0.048   HIGH       0.149
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0017    0017    0017    0017    0017    0017    0017    0016    0017    0016     0017    0017    0016    0017    0017
N DET.    0012    0000    0000    0000    0000    0001    0000    0000    0000    0000     0017    0016    0000    0004    0000
MEAN     0.108   0.370   0.089   1.254   0.457   0.041   0.279   0.560    7.12   0.240    0.000   0.170   0.158   0.598   0.684
S. D.    0.145   0.099   0.025   0.677   0.188   0.009   0.232   0.232    2.11   0.107    0.000   0.000   0.095   0.239   0.287
LOW      0.020   0.190   0.050   0.210   0.100   0.030   0.050   0.110    2.63   0.110    0.000   0.000   0.070   0.310   0.280
HIGH     0.360   0.630   0.140   2.740   0.755   0.060   1.020   1.130   10.35   0.540    0.000   0.170   0.480   1.130   1.190
```

BUTTERFISH PEPRILUS TRIACANTHUS 018014 AREA- NORTH ATLANTIC SITE- 02 MUSCLE

LENGTH NUM 1 MEAN 0.141 S. D. 0.000 LOW 0.141 HIGH 0.141
WEIGHT NUM 1 MEAN 0.060 S. D. 0.000 LOW 0.060 HIGH 0.060

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.000	0.320	0.110	4.000	0.630	0.070	0.182	0.655	9.28	0.320	0.000	0.000	0.250	1.250	0.500
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.320	0.110	4.000	0.630	0.070	0.182	0.655	9.28	0.320	0.000	0.000	0.250	1.250	0.500

BUTTERFISH PEPRILUS TRIACANTHUS 018014 AREA- NORTH ATLANTIC SITE- 03 MUSCLE

LENGTH NUM 3 MEAN 0.169 S. D. 0.015 LOW 0.154 HIGH 0.184
WEIGHT NUM 3 MEAN 0.115 S. D. 0.030 LOW 0.086 HIGH 0.145

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.240	0.353	0.052	3.070	0.517	0.042	0.378	0.527	6.92	0.260	0.060	0.060	0.145	0.783	0.622
S. D.	0.000	0.094	0.008	0.893	0.206	0.026	0.004	0.088	0.54	0.062	0.000	0.000	0.022	0.220	0.225
LOW	0.000	0.250	0.045	2.487	0.320	0.020	0.375	0.440	6.44	0.210	0.000	0.000	0.130	0.630	0.470
HIGH	0.240	0.435	0.060	4.098	0.730	0.070	0.380	0.615	7.50	0.330	0.060	0.060	0.170	1.035	0.880

BUTTERFISH PEPRILUS TRIACANTHUS 018014 AREA- NORTH ATLANTIC SITE- 06 MUSCLE

LENGTH NUM 4 MEAN 0.183 S. D. 0.020 LOW 0.157 HIGH 0.201
WEIGHT NUM 4 MEAN 0.141 S. D. 0.038 LOW 0.094 HIGH 0.174

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0003	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0000	0000
MEAN	0.040	0.407	0.081	1.844	0.524	0.040	0.239	0.340	7.02	0.199	0.060	0.155	0.131	0.888	0.615
S. D.	0.028	0.325	0.059	0.791	0.116	0.021	0.150	0.032	2.21	0.042	0.000	0.134	0.051	0.061	0.091
LOW	0.020	0.190	0.045	1.225	0.390	0.020	0.120	0.305	5.19	0.155	0.000	0.060	0.085	0.815	0.560
HIGH	0.060	0.780	0.170	3.000	0.650	0.065	0.455	0.380	10.00	0.255	0.060	0.250	0.200	0.940	0.750

BUTTERFISH PEPRILUS TRIACANTHUS 018014 AREA- NORTH ATLANTIC SITE- P1 MUSCLE

LENGTH NUM 19 MEAN 0.152 S. D. 0.013 LOW 0.132 HIGH 0.179
WEIGHT NUM 19 MEAN 0.079 S. D. 0.020 LOW 0.056 HIGH 0.127

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0019	0018	0019	0018	0018	0019	0018	0019	0019	0019	0019	0019	0019	0019	0019
N DET.	0013	0000	0001	0001	0000	0002	0000	0000	0000	0000	0012	0011	0000	0001	0000
MEAN	0.032	0.453	0.081	2.844	0.461	0.041	0.190	0.526	7.44	0.220	0.150	0.296	0.155	0.886	0.612
S. D.	0.018	0.192	0.029	1.168	0.164	0.010	0.178	0.197	2.13	0.084	0.077	0.216	0.038	0.256	0.230
LOW	0.010	0.225	0.050	1.300	0.180	0.020	0.030	0.215	4.72	0.070	0.060	0.060	0.095	0.480	0.220
HIGH	0.060	0.940	0.170	5.725	0.716	0.060	0.830	1.000	14.28	0.450	0.280	0.630	0.230	1.580	1.130

BUTTERFISH PEPRILUS TRIACANTHUS 018014 AREA- NORTH ATLANTIC SITE- R3 MUSCLE

LENGTH NUM 5 MEAN 0.130 S. D. 0.016 LOW 0.116 HIGH 0.155
WEIGHT NUM 5 MEAN 0.046 S. D. 0.020 LOW 0.032 HIGH 0.081

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0005	0000	0000	0000
MEAN	0.065	0.547	0.075	2.588	0.608	0.040	0.119	0.591	8.01	0.181	0.000	0.000	0.269	0.606	0.587
S. D.	0.035	0.317	0.010	0.810	0.177	0.016	0.054	0.077	0.68	0.059	0.000	0.000	0.056	0.139	0.109
LOW	0.040	0.315	0.065	1.375	0.335	0.020	0.060	0.480	7.19	0.090	0.000	0.000	0.180	0.440	0.490
HIGH	0.090	1.100	0.090	3.400	0.735	0.060	0.190	0.690	9.00	0.240	0.000	0.000	0.320	0.750	0.755

BUTTERFISH PEPRILUS TRIACANTHUS 018014 AREA- NORTH ATLANTIC SITE- S4 MUSCLE

LENGTH NUM 1 MEAN 0.156 S. D. 0.000 LOW 0.156 HIGH 0.156
WEIGHT NUM 1 MEAN 0.087 S. D. 0.000 LOW 0.087 HIGH 0.087

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0000
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.000	0.190	0.120	0.510	0.080	0.040	0.060	0.750	3.25	0.380	0.000	0.000	0.310	0.560	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.190	0.120	0.510	0.080	0.040	0.060	0.750	3.25	0.380	0.000	0.000	0.310	0.560	0.000

CATFISH, WHITE ICTALURUS CATUS 021002 AREA- NORTH ATLANTIC SITE- M8 MUSCLE

LENGTH NUM 1 MEAN 0.205 S. D. 0.000 LOW 0.205 HIGH 0.205
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.145	0.315	0.045	0.666	0.170	0.070	0.060	0.415	7.78	0.120	0.000	0.240	0.250	0.540	0.285
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.145	0.315	0.045	0.666	0.170	0.070	0.060	0.415	7.78	0.120	0.000	0.240	0.250	0.540	0.285

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

BULLHEAD, BROWN ICTALURUS NEBULOSUS 021007 AREA- NORTH ATLANTIC SITE- M6 MUSCLE

LENGTH	NUM	4	MEAN	0.187	S. D.	0.013	LOW	0.176	HIGH	0.206
WEIGHT	NUM	2	MEAN	2.270	S. D.	0.000	LOW	2.270	HIGH	2.270

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0003	0000	0000	0000	0000	0001	0000	0000	0000	0000	0004	0004	0000	0000	0000
MEAN	0.040	0.650	0.051	1.425	0.184	0.042	0.189	0.653	6.73	0.169	0.000	0.000	0.525	0.600	0.389
S. D.	0.000	0.133	0.009	0.927	0.091	0.003	0.072	0.467	1.17	0.045	0.000	0.000	0.267	0.238	0.181
LOW	0.000	0.470	0.040	0.300	0.050	0.040	0.130	0.300	5.50	0.130	0.000	0.000	0.300	0.310	0.190
HIGH	0.040	0.750	0.060	2.550	0.250	0.045	0.290	1.300	8.31	0.230	0.000	0.000	0.880	0.810	0.610

CATFISH, CHANNEL ICTALURUS PUNCTATUS 021010 AREA- NORTH ATLANTIC SITE- R5 MUSCLE

LENGTH	NUM	20	MEAN	0.532	S. D.	0.006	LOW	0.526	HIGH	0.538
WEIGHT	NUM	20	MEAN	1.611	S. D.	0.210	LOW	1.406	HIGH	1.816

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020
N DET.	0000	0000	0001	0001	0000	0010	0001	0000	0000	0000	0016	0018	0000	0004	0000
MEAN	0.172	0.398	0.060	1.725	0.322	0.030	0.143	0.315	5.94	0.252	0.563	0.540	0.184	0.559	0.503
S. D.	0.109	0.216	0.022	1.201	0.283	0.008	0.098	0.169	0.81	0.260	0.510	0.240	0.056	0.210	0.172
LOW	0.040	0.060	0.007	0.125	0.080	0.020	0.060	0.125	4.42	0.080	0.130	0.370	0.105	0.221	0.253
HIGH	0.380	0.996	0.110	4.596	1.315	0.040	0.346	0.855	7.25	1.250	1.120	0.710	0.350	1.120	0.880

CATFISH, SEA ARIUS FELIS 023001 AREA- GULF SITE- B8 MUSCLE

LENGTH	NUM	2	MEAN	0.225	S. D.	0.000	LOW	0.225	HIGH	0.225
WEIGHT	NUM	2	MEAN	0.340	S. D.	0.000	LOW	0.340	HIGH	0.340

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.153	0.426	0.038	8.977	0.517	0.053	0.093	0.500	18.99	0.244	0.145	0.213	0.529	0.613	0.733
S. D.	0.046	0.013	0.003	1.211	0.009	0.025	0.032	0.028	3.32	0.143	0.148	0.053	0.048	0.513	0.725
LOW	0.120	0.416	0.036	8.120	0.510	0.035	0.070	0.480	16.64	0.143	0.040	0.175	0.495	0.250	0.220
HIGH	0.185	0.435	0.040	9.833	0.523	0.070	0.115	0.520	21.34	0.345	0.250	0.250	0.563	0.976	1.245

CATFISH, SEA ARIUS FELIS 023001 AREA- GULF SITE- E5 MUSCLE

LENGTH	NUM	20	MEAN	0.363	S. D.	0.022	LOW	0.331	HIGH	0.398
WEIGHT	NUM	20	MEAN	0.520	S. D.	0.152	LOW	0.345	HIGH	0.788

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0019	0020	0019	0019	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0000	0001	0003	0000	0000	0004	0000	0000	0000	0001	0016	0012	0000	0004	0000
MEAN	0.468	0.426	0.099	17.391	0.447	0.041	0.146	0.301	10.90	0.262	0.343	0.270	0.211	0.784	0.536
S. D.	0.090	0.211	0.057	9.871	0.180	0.012	0.115	0.092	4.00	0.133	0.363	0.203	0.084	0.273	0.147
LOW	0.290	0.110	0.040	3.800	0.120	0.025	0.040	0.080	5.66	0.080	0.060	0.130	0.085	0.440	0.286
HIGH	0.640	0.860	0.210	39.750	0.745	0.070	0.560	0.465	23.47	0.595	0.870	0.750	0.400	1.560	0.790

CATFISH, SEA ARIUS FELIS 023001 AREA- GULF SITE- E5 LIVER

LENGTH	NUM	4	MEAN	0.361	S. D.	0.015	LOW	0.347	HIGH	0.375
WEIGHT	NUM	4	MEAN	0.507	S. D.	0.127	LOW	0.388	HIGH	0.625

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000	0000
MEAN	1.964	1.071	0.595	6.258	3.008	0.058	0.486	6.040	305.73	0.308	0.550	3.708	1.076	0.949	0.361
S. D.	1.166	0.268	0.284	1.374	1.435	0.015	0.377	3.328	44.02	0.106	0.217	3.156	0.706	0.556	0.069
LOW	1.100	0.810	0.335	4.750	1.410	0.040	0.080	2.615	260.94	0.235	0.410	1.500	0.300	0.370	0.300
HIGH	3.650	1.310	0.890	8.016	4.450	0.070	0.940	10.440	365.18	0.430	0.800	8.300	2.000	1.700	0.450

CATFISH, SEA ARIUS FELIS 023001 AREA- GULF SITE- G3 MUSCLE

LENGTH	NUM	8	MEAN	0.225	S. D.	0.000	LOW	0.225	HIGH	0.225
WEIGHT	NUM	8	MEAN	0.340	S. D.	0.000	LOW	0.340	HIGH	0.340

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0008	0008	0007	0008	0008	0008	0008	0008	0008	0008	0006
N DET.	0000	0000	0001	0000	0000	0003	0000	0000	0000	0000	0007	0007	0000	0004	0000
MEAN	0.181	0.489	0.090	5.894	0.468	0.028	0.154	0.452	12.80	0.280	0.880	0.780	0.249	0.993	0.458
S. D.	0.044	0.312	0.040	3.724	0.310	0.011	0.106	0.117	5.32	0.130	0.000	0.000	0.107	0.219	0.080
LOW	0.100	0.250	0.040	2.900	0.180	0.010	0.070	0.280	4.94	0.120	0.000	0.000	0.060	0.810	0.380
HIGH	0.240	1.190	0.130	13.400	1.100	0.040	0.370	0.605	21.43	0.570	0.880	0.780	0.390	1.250	0.590

CATFISH, SEA ARIUS FELIS 023001 AREA- GULF SITE- G5 MUSCLE

LENGTH	NUM	6	MEAN	0.330	S. D.	0.009	LOW	0.321	HIGH	0.340
WEIGHT	NUM	5	MEAN	0.400	S. D.	0.056	LOW	0.340	HIGH	0.482

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0005	0000	0000	0000
MEAN	0.244	0.606	0.118	8.203	0.351	0.025	0.278	0.458	13.95	0.173	0.000	0.310	0.188	0.678	0.483
S. D.	0.106	0.289	0.073	4.360	0.137	0.008	0.154	0.114	2.53	0.111	0.000	0.000	0.036	0.191	0.106
LOW	0.130	0.285	0.045	3.750	0.210	0.010	0.130	0.265	11.94	0.060	0.000	0.000	0.140	0.440	0.380
HIGH	0.410	1.060	0.260	14.750	0.590	0.030	0.560	0.580	18.75	0.340	0.000	0.310	0.230	0.940	0.630

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

CATFISH, SEA ARIUS FELIS 023001 AREA- GULF SITE- L5 MUSCLE

LENGTH NUM 11 MEAN 0.301 S. D. 0.016 LOW 0.283 HIGH 0.329
WEIGHT NUM 11 MEAN 0.530 S. D. 0.107 LOW 0.385 HIGH 0.729

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0010	0010	0011	0011	0011	0010	0011	0010	0011	0011	0011	0011
N DET.	0000	0001	0004	0000	0002	0003	0001	0000	0000	0002	0007	0006	0000	0005	0000
MEAN	0.240	0.421	0.056	15.306	0.353	0.033	0.249	0.406	17.09	0.309	0.470	0.372	0.209	0.707	0.539
S. D.	0.051	0.169	0.025	10.786	0.121	0.016	0.234	0.063	6.23	0.129	0.236	0.356	0.079	0.295	0.309
LOW	0.150	0.200	0.025	2.480	0.190	0.010	0.060	0.290	8.39	0.180	0.250	0.090	0.130	0.370	0.250
HIGH	0.310	0.725	0.090	39.500	0.540	0.060	0.730	0.526	29.14	0.610	0.720	0.940	0.390	1.160	1.315

CATFISH, SEA ARIUS FELIS 023001 AREA- GULF SITE- L5 LIVER

LENGTH NUM 2 MEAN 0.297 S. D. 0.003 LOW 0.295 HIGH 0.299
WEIGHT NUM 2 MEAN 0.510 S. D. 0.004 LOW 0.507 HIGH 0.512

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0001	0001	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.640	1.023	0.505	6.550	1.870	0.055	0.145	2.580	293.61	0.350	0.325	0.795	1.470	0.250	0.425
S. D.	0.000	0.378	0.049	0.000	0.000	0.035	0.134	0.071	332.28	0.212	0.177	0.049	0.552	0.000	0.035
LOW	0.000	0.755	0.470	0.000	0.000	0.030	0.050	2.530	58.65	0.200	0.200	0.760	1.080	0.000	0.400
HIGH	0.640	1.290	0.540	6.550	1.870	0.080	0.240	2.630	528.57	0.500	0.450	0.830	1.860	0.250	0.450

CATFISH, GAFFTOPSAIL BAGRE MARINUS 023002 AREA- GULF SITE- B8 MUSCLE

LENGTH NUM 7 MEAN 0.393 S. D. 0.046 LOW 0.350 HIGH 0.470
WEIGHT NUM 6 MEAN 1.262 S. D. 0.455 LOW 1.006 HIGH 2.155

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0007	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0000	0000	0002	0000	0000	0005	0000	0000	0000	0002	0004	0005	0000	0002	0000
MEAN	0.301	0.455	0.077	7.572	0.210	0.045	0.241	0.351	12.81	0.243	0.240	0.467	0.177	1.174	0.547
S. D.	0.100	0.207	0.053	4.200	0.073	0.015	0.151	0.079	4.12	0.078	0.185	0.444	0.140	0.347	0.202
LOW	0.173	0.200	0.040	2.100	0.100	0.030	0.055	0.195	6.78	0.150	0.050	0.060	0.030	0.640	0.300
HIGH	0.430	0.750	0.180	15.950	0.310	0.060	0.550	0.436	18.13	0.360	0.440	0.940	0.466	1.536	0.870

CATFISH, GAFFTOPSAIL BAGRE MARINUS 023002 AREA- GULF SITE- E5 MUSCLE

LENGTH NUM 20 MEAN 0.506 S. D. 0.017 LOW 0.475 HIGH 0.548
WEIGHT NUM 20 MEAN 1.229 S. D. 0.172 LOW 0.895 HIGH 1.655

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0019	0020	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0000	0000	0002	0000	0000	0004	0000	0000	0000	0002	0013	0016	0001	0002	0000
MEAN	0.624	0.379	0.066	12.470	0.284	0.041	0.166	0.319	13.53	0.193	0.189	0.235	0.191	0.887	0.570
S. D.	0.196	0.204	0.026	6.432	0.094	0.014	0.107	0.101	7.32	0.089	0.156	0.175	0.129	0.395	0.172
LOW	0.350	0.020	0.010	2.900	0.130	0.020	0.045	0.125	4.44	0.040	0.050	0.060	0.040	0.440	0.250
HIGH	1.200	0.810	0.120	25.500	0.470	0.060	0.440	0.560	30.63	0.380	0.440	0.470	0.530	1.880	1.000

CATFISH, GAFFTOPSAIL BAGRE MARINUS 023002 AREA- GULF SITE- E5 LIVER

LENGTH NUM 2 MEAN 0.506 S. D. 0.013 LOW 0.496 HIGH 0.515
WEIGHT NUM 2 MEAN 1.220 S. D. 0.102 LOW 1.148 HIGH 1.292

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	1.310	0.375	0.340	4.750	3.745	0.030	0.165	1.180	815.00	0.300	0.350	1.565	0.315	0.900	0.765
S. D.	0.467	0.177	0.000	1.061	2.553	0.000	0.049	0.806	1145.51	0.085	0.000	1.506	0.290	0.566	0.191
LOW	0.980	0.250	0.000	4.000	1.940	0.000	0.130	0.610	5.00	0.240	0.000	0.500	0.110	0.500	0.630
HIGH	1.640	0.500	0.340	5.500	5.550	0.030	0.200	1.750	1625.00	0.360	0.350	2.630	0.520	1.300	0.900

CATFISH, GAFFTOPSAIL BAGRE MARINUS 023002 AREA- GULF SITE- H1 MUSCLE

LENGTH NUM 4 MEAN 0.494 S. D. 0.015 LOW 0.475 HIGH 0.510
WEIGHT NUM 4 MEAN 1.029 S. D. 0.140 LOW 0.908 HIGH 1.163

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0003	0004	0004	0004	0004	0004	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.610	0.324	0.060	8.213	0.281	0.034	0.104	0.341	13.25	0.166	0.160	0.190	0.196	0.653	0.480
S. D.	0.322	0.163	0.009	4.728	0.076	0.005	0.034	0.255	1.04	0.059	0.000	0.000	0.044	0.164	0.075
LOW	0.280	0.160	0.050	2.827	0.180	0.030	0.060	0.080	12.28	0.090	0.000	0.000	0.165	0.500	0.410
HIGH	1.020	0.540	0.070	14.300	0.360	0.040	0.130	0.690	14.34	0.215	0.160	0.190	0.260	0.880	0.560

CATFISH, GAFFTOPSAIL BAGRE MARINUS 023002 AREA- GULF SITE- H1 LIVER

LENGTH NUM 1 MEAN 0.495 S. D. 0.000 LOW 0.495 HIGH 0.495
WEIGHT NUM 1 MEAN 1.078 S. D. 0.000 LOW 1.078 HIGH 1.078

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	1.220	0.630	0.460	3.650	2.500	0.030	0.060	2.440	184.38	0.260	0.340	1.630	1.330	0.560	0.500
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	1.220	0.630	0.460	3.650	2.500	0.030	0.060	2.440	184.38	0.260	0.340	1.630	1.330	0.560	0.500

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

CATFISH, GAFFTOPSAIL BAGRE MARINUS 023002 AREA- GULF SITE- L5 MUSCLE

LENGTH	NUM	2	MEAN	0.288	S. D.	0.013	LOW	0.279	HIGH	0.297
WEIGHT	NUM	2	MEAN	0.470	S. D.	0.098	LOW	0.400	HIGH	0.539

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.458	0.350	0.075	62.325	0.378	0.030	0.216	0.488	9.02	0.320	0.100	0.325	0.178	0.850	0.545
S. D.	0.145	0.057	0.000	13.895	0.152	0.000	0.211	0.011	1.90	0.255	0.000	0.000	0.074	0.566	0.042
LOW	0.355	0.310	0.000	52.500	0.270	0.000	0.066	0.480	7.67	0.140	0.000	0.000	0.125	0.450	0.515
HIGH	0.560	0.390	0.075	72.150	0.485	0.030	0.365	0.495	10.36	0.500	0.100	0.325	0.230	1.250	0.575

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- E8 MUSCLE

LENGTH	NUM	2	MEAN	0.885	S. D.	0.035	LOW	0.860	HIGH	0.910
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.325	0.470	0.075	1.085	0.425	0.025	0.145	0.165	4.57	0.175	0.000	0.000	0.150	0.310	0.645
S. D.	0.007	0.226	0.007	0.516	0.035	0.021	0.021	0.021	1.15	0.049	0.000	0.000	0.085	0.000	0.375
LOW	0.320	0.310	0.070	0.720	0.400	0.010	0.130	0.150	3.75	0.140	0.000	0.000	0.090	0.000	0.380
HIGH	0.330	0.630	0.080	1.450	0.450	0.040	0.160	0.180	5.38	0.210	0.000	0.000	0.210	0.310	0.910

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- E9 MUSCLE

LENGTH	NUM	3	MEAN	0.553	S. D.	0.040	LOW	0.510	HIGH	0.590
WEIGHT	NUM	3	MEAN	1.770	S. D.	0.411	LOW	1.313	HIGH	2.109

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0002	0000
MEAN	0.153	0.325	0.078	1.693	0.222	0.032	0.128	0.172	3.46	0.228	0.000	0.000	0.213	0.500	0.608
S. D.	0.067	0.067	0.028	0.990	0.164	0.014	0.090	0.083	0.98	0.070	0.000	0.000	0.095	0.000	0.080
LOW	0.110	0.250	0.060	1.055	0.090	0.015	0.060	0.080	2.67	0.150	0.000	0.000	0.115	0.000	0.520
HIGH	0.230	0.380	0.110	2.833	0.406	0.040	0.230	0.240	4.56	0.285	0.000	0.000	0.305	0.500	0.675

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- I5 MUSCLE

LENGTH	NUM	6	MEAN	0.590	S. D.	0.107	LOW	0.480	HIGH	0.730
WEIGHT	NUM	5	MEAN	2.365	S. D.	1.422	LOW	1.040	HIGH	4.080

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0005	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0005	0000	0003	0000
MEAN	0.278	0.288	0.053	2.415	0.659	0.036	0.134	0.135	3.45	0.198	0.190	0.310	0.126	0.385	0.511
S. D.	0.166	0.050	0.012	1.388	0.113	0.011	0.105	0.051	0.32	0.068	0.000	0.000	0.031	0.080	0.071
LOW	0.130	0.250	0.035	0.580	0.500	0.025	0.060	0.060	3.00	0.090	0.000	0.000	0.090	0.310	0.410
HIGH	0.585	0.375	0.065	4.400	0.780	0.055	0.340	0.190	3.81	0.265	0.190	0.310	0.180	0.470	0.590

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- I9 MUSCLE

LENGTH	NUM	3	MEAN	0.517	S. D.	0.067	LOW	0.460	HIGH	0.590
WEIGHT	NUM	3	MEAN	1.524	S. D.	0.675	LOW	1.036	HIGH	2.294

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.205	0.303	0.053	1.848	0.543	0.037	0.088	0.212	3.31	0.143	0.000	0.000	0.135	0.470	0.495
S. D.	0.101	0.068	0.012	0.185	0.073	0.013	0.045	0.044	0.33	0.047	0.000	0.000	0.005	0.330	0.120
LOW	0.090	0.250	0.040	1.635	0.460	0.025	0.060	0.175	2.97	0.090	0.000	0.000	0.130	0.250	0.410
HIGH	0.280	0.380	0.060	1.963	0.595	0.050	0.140	0.260	3.63	0.180	0.000	0.000	0.140	0.850	0.580

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- J2 MUSCLE

LENGTH	NUM	3	MEAN	0.877	S. D.	0.047	LOW	0.840	HIGH	0.930
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	1.040	0.313	0.065	1.710	0.577	0.017	0.147	0.147	4.00	0.158	0.000	0.000	0.148	0.562	0.322
S. D.	0.392	0.088	0.030	1.060	0.023	0.006	0.096	0.038	0.10	0.028	0.000	0.000	0.038	0.003	0.020
LOW	0.770	0.250	0.045	0.592	0.550	0.010	0.060	0.120	3.94	0.130	0.000	0.000	0.110	0.560	0.310
HIGH	1.490	0.375	0.100	2.700	0.590	0.020	0.250	0.190	4.12	0.185	0.000	0.000	0.185	0.565	0.345

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- J2 LIVER

LENGTH	NUM	3	MEAN	0.877	S. D.	0.047	LOW	0.840	HIGH	0.930
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0002	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	2.443	0.377	0.688	5.093	3.435	0.023	0.093	1.723	16.15	0.275	0.188	1.040	1.083	0.417	0.282
S. D.	2.020	0.065	0.273	1.572	0.997	0.004	0.046	0.417	2.62	0.058	0.088	0.749	0.631	0.050	0.030
LOW	0.900	0.310	0.415	3.280	2.730	0.020	0.060	1.330	14.30	0.215	0.125	0.440	0.430	0.370	0.250
HIGH	4.730	0.440	0.960	6.075	4.140	0.025	0.125	2.160	18.00	0.330	0.250	1.880	1.690	0.470	0.310

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- J3 MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	NUM	1	MEAN	0.680	S. D.	0.000	LOW	0.680	HIGH 0.680
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.100	0.500	0.040	2.675	0.910	0.000	0.090	0.260	3.75	0.190	0.000	0.000	0.110	0.340	0.220
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.100	0.500	0.040	2.675	0.910	0.000	0.090	0.260	3.75	0.190	0.000	0.000	0.110	0.340	0.220

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- J4 MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	NUM	14	MEAN	0.621	S. D.	0.137	LOW	0.395	HIGH 0.810
WEIGHT	NUM	13	MEAN	2.463	S. D.	1.630	LOW	0.599	HIGH 5.185

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0014	0013	0014	0014	0014	0014	0013	0014	0014	0014	0014	0014	0014	0014	0014
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0012	0013	0000	0007	0000
MEAN	0.397	0.385	0.073	2.703	0.510	0.034	0.168	0.168	3.48	0.217	0.060	0.060	0.160	0.599	0.433
S. D.	0.231	0.130	0.035	2.415	0.194	0.018	0.059	0.073	0.54	0.035	0.000	0.000	0.048	0.236	0.145
LOW	0.145	0.185	0.040	0.690	0.060	0.020	0.095	0.060	2.87	0.160	0.060	0.000	0.090	0.310	0.190
HIGH	0.920	0.630	0.150	9.500	0.900	0.090	0.310	0.340	4.75	0.290	0.060	0.060	0.250	0.940	0.750

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- J4 LIVER

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	NUM	2	MEAN	0.718	S. D.	0.088	LOW	0.655	HIGH 0.780
WEIGHT	NUM	1	MEAN	2.792	S. D.	0.000	LOW	2.792	HIGH 2.792

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0001	0000	0000	0000	0000	0001	0000	0000	0000	0002	0000	0000	0001	0000
MEAN	0.100	0.440	0.430	1.925	2.150	0.035	0.060	1.720	13.25	0.365	0.000	0.160	0.535	0.190	0.330
S. D.	0.000	0.000	0.495	0.000	0.000	0.007	0.000	0.834	8.65	0.389	0.000	0.042	0.361	0.000	0.156
LOW	0.000	0.000	0.080	0.000	0.000	0.030	0.000	1.130	7.13	0.090	0.000	0.130	0.280	0.000	0.220
HIGH	0.100	0.440	0.780	1.925	2.150	0.040	0.060	2.310	19.37	0.640	0.000	0.190	0.790	0.190	0.440

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- J5 MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	NUM	16	MEAN	0.635	S. D.	0.113	LOW	0.400	HIGH 0.800
WEIGHT	NUM	8	MEAN	1.662	S. D.	0.757	LOW	0.591	HIGH 2.660

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0015	0016	0016	0016	0015	0016	0016	0015	0016	0016	0016	0016	0016	0016	0015
N DET.	0000	0000	0002	0000	0000	0000	0001	0000	0000	0000	0012	0013	0000	0003	0000
MEAN	0.393	0.485	0.065	3.411	0.567	0.027	0.166	0.178	3.70	0.219	0.106	0.347	0.199	0.602	0.461
S. D.	0.370	0.252	0.023	1.956	0.202	0.011	0.118	0.099	0.95	0.065	0.067	0.232	0.096	0.118	0.151
LOW	0.140	0.155	0.030	0.675	0.210	0.010	0.060	0.060	2.06	0.130	0.030	0.100	0.095	0.440	0.225
HIGH	1.650	1.000	0.110	7.400	0.920	0.060	0.500	0.460	5.69	0.370	0.190	0.560	0.390	0.815	0.880

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- J5 LIVER

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	NUM	6	MEAN	0.757	S. D.	0.055	LOW	0.690	HIGH 0.820
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0005	0006	0006	0006	0006	0006	0006	0006
N DET.	0002	0000	0000	0001	0000	0003	0002	0000	0000	0000	0006	0001	0000	0000	0001
MEAN	0.183	0.437	0.233	4.606	1.392	0.040	0.088	1.383	12.79	0.181	0.000	0.715	0.462	0.278	0.194
S. D.	0.092	0.338	0.141	1.786	0.550	0.026	0.069	0.448	4.57	0.109	0.000	0.920	0.117	0.201	0.251
LOW	0.070	0.120	0.080	2.575	0.750	0.010	0.040	0.785	8.44	0.030	0.000	0.060	0.350	0.090	0.030
HIGH	0.280	1.060	0.470	7.315	2.300	0.060	0.190	1.880	20.60	0.330	0.000	2.340	0.690	0.535	0.630

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- J6 MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	NUM	5	MEAN	0.752	S. D.	0.108	LOW	0.600	HIGH 0.900
WEIGHT	NUM	1	MEAN	1.347	S. D.	0.000	LOW	1.347	HIGH 1.347

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0005	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0005	0000	0001	0000
MEAN	0.508	0.513	0.064	2.608	0.391	0.023	0.170	0.198	3.86	0.163	0.000	0.040	0.131	0.582	0.402
S. D.	0.185	0.279	0.030	1.171	0.121	0.005	0.107	0.066	1.31	0.057	0.000	0.000	0.049	0.249	0.205
LOW	0.305	0.155	0.030	1.010	0.195	0.020	0.070	0.145	2.00	0.110	0.000	0.000	0.070	0.375	0.060
HIGH	0.780	0.880	0.110	4.000	0.535	0.030	0.380	0.325	5.25	0.250	0.000	0.040	0.215	0.965	0.590

CUSK BROSME BROSME 033004 AREA- NORTH ATLANTIC SITE- J6 LIVER

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	NUM	1	MEAN	0.730	S. D.	0.000	LOW	0.730	HIGH 0.730
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.260	0.310	0.300	5.100	1.645	0.020	0.060	2.185	8.56	0.235	0.000	1.340	0.705	0.315	0.425
S. D.	0.000	0.085	0.339	0.000	0.742	0.000	0.000	0.445	1.50	0.007	0.000	0.000	0.643	0.092	0.290
LOW	0.000	0.250	0.060	5.100	1.120	0.000	0.060	1.870	7.50	0.230	0.000	0.000	0.250	0.250	0.220
HIGH	0.260	0.370	0.540	5.100	2.170	0.020	0.060	2.500	9.62	0.240	0.000	1.340	1.160	0.380	0.630

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                                         TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                              REPORT   MF17
                                        IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                       BY TISSUE AND LOCATION


 CUSK                              BROSME BROSME                      033004   AREA- NORTH ATLANTIC      SITE- J7   MUSCLE

LENGTH     NUM    4   MEAN        0.743   S. D.     0.153   LOW      0.600   HIGH        0.960
WEIGHT     NUM    2   MEAN        3.039   S. D.     1.059   LOW      2.290   HIGH        3.787
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0004    0004    0004    0004    0004    0004    0004    0004    0004    0004     0004    0004    0004    0004    0004
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000     0003    0003    0000    0000    0000
MEAN      0.343   0.408   0.073   2.994   0.452   0.036   0.186   0.188    4.11   0.210    0.060   0.280   0.228   0.555   0.571
S. D.     0.175   0.188   0.022   2.827   0.166   0.016   0.166   0.082    0.99   0.061    0.000   0.000   0.088   0.199   0.336
LOW       0.130   0.250   0.050   0.260   0.250   0.025   0.060   0.080    3.28   0.150    0.000   0.000   0.130   0.280   0.220
HIGH      0.540   0.625   0.100   5.450   0.620   0.060   0.430   0.280    5.31   0.280    0.060   0.280   0.320   0.750   1.015

 CUSK                              BROSME BROSME                      033004   AREA- NORTH ATLANTIC      SITE- J7   LIVER

LENGTH     NUM    1   MEAN        0.780   S. D.     0.000   LOW      0.780   HIGH        0.780
WEIGHT     NUM    0   MEAN        0.000   S. D.     0.000   LOW      0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001     0001    0001    0001    0001    0001
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000     0001    0000    0000    0000    0000
MEAN      0.060   0.310   0.170   4.955   1.480   0.010   0.060   1.190   11.94   0.250    0.000   0.090   0.640   0.630   0.530
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000   0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000   0.000
HIGH      0.060   0.310   0.170   4.955   1.480   0.010   0.060   1.190   11.94   0.250    0.000   0.090   0.640   0.630   0.530

 CUSK                              BROSME BROSME                      033004   AREA- NORTH ATLANTIC      SITE- J8   MUSCLE

LENGTH     NUM    1   MEAN        0.700   S. D.     0.000   LOW      0.700   HIGH        0.700
WEIGHT     NUM    1   MEAN        4.190   S. D.     0.000   LOW      4.190   HIGH        4.190
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001     0001    0001    0001    0001    0001
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000     0001    0001    0000    0000    0000
MEAN      0.520   0.440   0.060   1.300   0.750   0.010   0.130   0.420    5.81   0.370    0.000   0.000   0.110   0.630   0.500
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000   0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000   0.000
HIGH      0.520   0.440   0.060   1.300   0.750   0.010   0.130   0.420    5.81   0.370    0.000   0.000   0.110   0.630   0.500

 CUSK                              BROSME BROSME                      033004   AREA- NORTH ATLANTIC      SITE- K4   MUSCLE

LENGTH     NUM    8   MEAN        0.673   S. D.     0.100   LOW      0.500   HIGH        0.790
WEIGHT     NUM    4   MEAN        3.018   S. D.     1.310   LOW      1.310   HIGH        4.502
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0010    0009    0010    0010    0009    0010    0010    0009    0010    0010     0010    0010    0010    0010    0010
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000     0009    0007    0000    0001    0000
MEAN      0.275   0.424   0.064   2.660   0.607   0.029   0.106   0.211    4.65   0.165    0.130   0.360   0.151   0.595   0.518
S. D.     0.136   0.202   0.020   0.973   0.210   0.011   0.046   0.096    0.92   0.057    0.000   0.236   0.054   0.170   0.164
LOW       0.110   0.190   0.040   1.337   0.263   0.010   0.050   0.090    3.50   0.085    0.000   0.190   0.090   0.375   0.340
HIGH      0.540   0.760   0.100   4.600   0.900   0.050   0.190   0.370    6.31   0.240    0.130   0.630   0.280   0.970   0.910

 CUSK                              BROSME BROSME                      033004   AREA- NORTH ATLANTIC      SITE- K4   LIVER

LENGTH     NUM    2   MEAN        0.740   S. D.     0.071   LOW      0.690   HIGH        0.790
WEIGHT     NUM    1   MEAN        3.139   S. D.     0.000   LOW      3.139   HIGH        3.139
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0002    0002    0002    0002    0002    0002    0002    0002    0002    0002     0002    0002    0002    0002    0002
N DET.     0001    0000    0000    0000    0000    0000    0000    0000    0000    0000     0001    0001    0000    0001    0001
MEAN      0.120   0.470   0.475   4.475   4.175   0.020   0.130   1.435   10.47   0.140    0.190   0.880   0.560   0.750   0.390
S. D.     0.000   0.311   0.488   2.652   1.308   0.014   0.000   0.007    6.24   0.000    0.000   0.000   0.453   0.000   0.000
LOW       0.000   0.250   0.130   2.600   3.250   0.010   0.130   1.430    6.06   0.140    0.000   0.000   0.240   0.000   0.000
HIGH      0.120   0.690   0.820   6.350   5.100   0.030   0.130   1.440   14.88   0.140    0.190   0.880   0.880   0.750   0.390

 CUSK                              BROSME BROSME                      033004   AREA- NORTH ATLANTIC      SITE- K5   MUSCLE

LENGTH     NUM    4   MEAN        0.678   S. D.     0.050   LOW      0.610   HIGH        0.730
WEIGHT     NUM    0   MEAN        0.000   S. D.     0.000   LOW      0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0004    0004    0004    0004    0004    0004    0004    0004    0004    0004     0004    0004    0004    0004    0004
N DET.     0000    0000    0000    0000    0000    0000    0001    0000    0000    0000     0004    0003    0000    0000    0000
MEAN      0.273   0.353   0.056   2.478   0.508   0.016   0.125   0.170    3.47   0.145    0.000   0.440   0.139   0.409   0.429
S. D.     0.129   0.139   0.005   0.691   0.076   0.006   0.056   0.041    0.32   0.055    0.000   0.000   0.010   0.128   0.083
LOW       0.110   0.190   0.050   1.608   0.400   0.010   0.060   0.130    3.18   0.080    0.000   0.000   0.125   0.310   0.345
HIGH      0.390   0.530   0.060   3.300   0.575   0.025   0.160   0.225    3.87   0.195    0.000   0.440   0.150   0.590   0.500

 CUSK                              BROSME BROSME                      033004   AREA- NORTH ATLANTIC      SITE- K5   LIVER

LENGTH     NUM    2   MEAN        0.710   S. D.     0.028   LOW      0.690   HIGH        0.730
WEIGHT     NUM    0   MEAN        0.000   S. D.     0.000   LOW      0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0002    0002    0002    0002    0000    0001    0002    0001    0002    0002     0002    0002    0002    0002    0002
N DET.     0001    0000    0000    0000    0000    0000    0002    0000    0000    0000     0001    0001    0000    0000    0000
MEAN      0.170   0.130   0.540   1.675   0.000   0.010   0.000   0.490   15.53   0.180    0.190   0.810   0.510   0.575   0.170
S. D.     0.000   0.000   0.552   1.732   0.000   0.000   0.000   0.000    1.46   0.085    0.000   0.000   0.467   0.332   0.028
LOW       0.000   0.130   0.150   0.450   0.000   0.000   0.000   0.000   14.50   0.120    0.000   0.000   0.180   0.340   0.150
HIGH      0.170   0.130   0.930   2.900   0.000   0.010   0.000   0.490   16.56   0.240    0.190   0.810   0.840   0.810   0.190
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

CUSK   BROSME BROSME   033004   AREA- NORTH ATLANTIC   SITE- K7   MUSCLE

LENGTH NUM 3 MEAN 0.627 S. D. 0.165 LOW 0.460 HIGH 0.790
WEIGHT NUM 3 MEAN 2.214 S. D. 1.251 LOW 0.813 HIGH 3.220

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.390	0.222	0.048	1.827	0.387	0.038	0.237	0.215	3.46	0.152	0.000	0.000	0.133	0.397	0.543
S. D.	0.256	0.111	0.008	0.607	0.152	0.003	0.235	0.083	0.52	0.049	0.000	0.000	0.042	0.204	0.127
LOW	0.120	0.130	0.040	1.320	0.250	0.035	0.050	0.160	3.13	0.110	0.000	0.000	0.100	0.250	0.470
HIGH	0.630	0.345	0.055	2.500	0.550	0.040	0.500	0.310	4.06	0.205	0.000	0.000	0.180	0.630	0.690

COD, PAC. (GRAY)   GADUS MACROCEPHALUS   033007   AREA- PACIFIC NORTHWEST   SITE- G9   MUSCLE

LENGTH NUM 10 MEAN 0.534 S. D. 0.008 LOW 0.525 HIGH 0.540
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0001	0004	0000	0000	0005	0001	0000	0000	0004	0009	0008	0002	0005	0000
MEAN	0.107	0.342	0.067	12.355	0.514	0.048	0.154	0.221	4.46	0.305	0.150	0.450	0.130	0.982	0.566
S. D.	0.024	0.176	0.029	14.151	0.229	0.013	0.103	0.103	1.77	0.125	0.000	0.071	0.058	0.449	0.278
LOW	0.060	0.150	0.040	2.700	0.150	0.040	0.045	0.110	1.78	0.172	0.000	0.400	0.055	0.360	0.350
HIGH	0.140	0.626	0.110	44.700	1.005	0.070	0.296	0.430	7.14	0.500	0.150	0.500	0.215	1.630	1.250

COD, PAC. (GRAY)   GADUS MACROCEPHALUS   033007   AREA- PACIFIC NORTHWEST   SITE- G9   LIVER

LENGTH NUM 8 MEAN 0.534 S. D. 0.008 LOW 0.525 HIGH 0.540
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0007	0007	0008	0008	0008	0008	0008	0008	0008	0008	0007	0008
N DET.	0007	0001	0003	0000	0000	0001	0002	0000	0000	0002	0001	0007	0000	0003	0001
MEAN	0.010	0.161	0.098	5.265	1.419	0.044	0.104	2.585	11.09	0.223	0.126	0.070	0.571	0.110	0.279
S. D.	0.000	0.050	0.036	2.020	0.495	0.024	0.062	0.883	4.47	0.119	0.073	0.000	0.255	0.042	0.194
LOW	0.000	0.120	0.070	2.320	0.920	0.010	0.040	1.440	3.75	0.080	0.050	0.000	0.250	0.050	0.100
HIGH	0.010	0.260	0.160	7.640	2.225	0.080	0.190	3.770	16.88	0.380	0.250	0.070	1.000	0.150	0.560

COD, PAC. (GRAY)   GADUS MACROCEPHALUS   033007   AREA- PACIFIC NORTHWEST   SITE- M2   MUSCLE

LENGTH NUM 2 MEAN 0.620 S. D. 0.028 LOW 0.600 HIGH 0.640
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0002	0002	0001	0001	0000
MEAN	0.158	0.144	0.080	10.598	0.410	0.085	0.116	0.200	3.18	0.153	0.000	0.000	0.160	0.650	0.850
S. D.	0.004	0.175	0.000	12.306	0.028	0.064	0.065	0.028	0.04	0.011	0.000	0.000	0.000	0.000	0.636
LOW	0.155	0.020	0.000	1.896	0.390	0.040	0.070	0.180	3.15	0.145	0.000	0.000	0.000	0.000	0.400
HIGH	0.160	0.267	0.080	19.300	0.430	0.130	0.162	0.220	3.21	0.160	0.000	0.000	0.160	0.650	1.300

COD, PAC. (GRAY)   GADUS MACROCEPHALUS   033007   AREA- PACIFIC NORTHWEST   SITE- M5   MUSCLE

LENGTH NUM 16 MEAN 0.655 S. D. 0.074 LOW 0.500 HIGH 0.760
WEIGHT NUM 13 MEAN 3.803 S. D. 1.226 LOW 1.474 HIGH 5.670

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0017	0017	0017	0017	0016	0017	0017	0017	0017	0017	0017	0017	0017	0017	0015
N DET.	0000	0000	0004	0000	0001	0008	0001	0001	0000	0000	0013	0014	0001	0002	0000
MEAN	0.169	0.365	0.066	8.893	0.556	0.031	0.212	0.235	3.83	0.230	0.163	0.367	0.138	0.654	0.557
S. D.	0.054	0.202	0.047	6.170	0.172	0.021	0.130	0.069	0.79	0.131	0.137	0.277	0.104	0.435	0.270
LOW	0.060	0.105	0.030	3.030	0.210	0.010	0.070	0.110	2.50	0.070	0.060	0.060	0.060	0.130	0.120
HIGH	0.260	0.880	0.180	28.500	0.810	0.070	0.613	0.360	5.36	0.640	0.350	0.600	0.500	1.630	1.350

COD, PAC. (GRAY)   GADUS MACROCEPHALUS   033007   AREA- PACIFIC NORTHWEST   SITE- M5   LIVER

LENGTH NUM 1 MEAN 0.575 S. D. 0.000 LOW 0.575 HIGH 0.575
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0001	0000	0000	0000	0000	0000	0000	0001	0000	0001	0000	0001	0000
MEAN	0.020	0.400	0.000	3.180	1.780	0.140	0.170	4.860	18.57	0.000	0.250	0.000	0.930	0.000	0.350
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.400	0.000	3.180	1.780	0.140	0.170	4.860	18.57	0.000	0.250	0.000	0.930	0.000	0.350

COD, PAC. (GRAY)   GADUS MACROCEPHALUS   033007   AREA- PACIFIC NORTHWEST   SITE- M8   MUSCLE

LENGTH NUM 1 MEAN 0.510 S. D. 0.000 LOW 0.510 HIGH 0.510
WEIGHT NUM 1 MEAN 1.134 S. D. 0.000 LOW 1.134 HIGH 1.134

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.140	0.420	0.180	3.455	0.460	0.035	0.817	0.365	3.99	0.720	0.000	0.000	0.180	0.783	0.450
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.140	0.420	0.180	3.455	0.460	0.035	0.817	0.365	3.99	0.720	0.000	0.000	0.180	0.783	0.450

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

COD, PAC. (GRAY) GADUS MACROCEPHALUS 033007 AREA- PACIFIC NORTHWEST SITE- N1 MUSCLE

LENGTH NUM 10 MEAN 0.526 S. D. 0.040 LOW 0.450 HIGH 0.570
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0008	0008	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0001	0003	0000	0000	0005	0002	0000	0000	0004	0008	0009	0000	0002	0000
MEAN	0.261	0.615	0.055	10.200	0.401	0.037	0.127	0.173	3.73	0.199	0.105	1.020	0.159	0.856	0.632
S. D.	0.089	0.555	0.014	8.614	0.174	0.010	0.065	0.040	0.88	0.097	0.064	0.000	0.077	0.666	0.241
LOW	0.163	0.150	0.040	3.322	0.120	0.025	0.050	0.125	2.68	0.070	0.060	0.000	0.070	0.250	0.350
HIGH	0.400	1.780	0.070	30.250	0.620	0.050	0.225	0.253	5.33	0.320	0.150	1.020	0.325	1.750	0.970

COD, PAC. (GRAY) GADUS MACROCEPHALUS 033007 AREA- PACIFIC NORTHWEST SITE- N1 LIVER

LENGTH NUM 2 MEAN 0.460 S. D. 0.014 LOW 0.450 HIGH 0.470
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0001	0000	0000	0000	0000	0000	0000	0001	0000	0002	0000	0000	0000
MEAN	0.098	0.268	0.110	8.538	3.643	0.873	0.170	10.565	25.25	0.360	0.160	0.000	1.638	0.150	0.153
S. D.	0.110	0.350	0.000	0.053	2.790	0.180	0.099	0.714	3.69	0.000	0.057	0.000	0.357	0.141	0.039
LOW	0.020	0.020	0.000	8.500	1.670	0.745	0.100	10.060	22.64	0.000	0.120	0.000	1.385	0.050	0.125
HIGH	0.175	0.515	0.110	8.575	5.616	1.000	0.240	11.070	27.86	0.360	0.200	0.000	1.890	0.250	0.180

COD, PAC. (GRAY) GADUS MACROCEPHALUS 033007 AREA- ALASKA SITE- K7 MUSCLE

LENGTH NUM 9 MEAN 0.666 S. D. 0.065 LOW 0.600 HIGH 0.760
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0008	0009	0009	0009	0009	0009	0009	0009	0009	0009	0008
N DET.	0000	0000	0000	0000	0000	0006	0000	0000	0000	0000	0008	0009	0000	0000	0000
MEAN	0.130	0.323	0.055	4.536	0.291	0.025	0.163	0.251	4.04	0.144	0.060	0.000	0.087	0.483	0.477
S. D.	0.086	0.056	0.012	1.998	0.156	0.009	0.124	0.070	0.48	0.056	0.000	0.000	0.009	0.075	0.095
LOW	0.020	0.230	0.040	0.750	0.140	0.020	0.060	0.160	3.38	0.070	0.000	0.000	0.075	0.370	0.355
HIGH	0.310	0.380	0.075	7.000	0.630	0.035	0.345	0.355	4.81	0.225	0.060	0.000	0.100	0.595	0.630

COD, PAC. (GRAY) GADUS MACROCEPHALUS 033007 AREA- ALASKA SITE- N6 MUSCLE

LENGTH NUM 10 MEAN 0.666 S. D. 0.058 LOW 0.590 HIGH 0.750
WEIGHT NUM 10 MEAN 2.778 S. D. 0.586 LOW 2.155 HIGH 3.629

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0006	0007	0000	0000	0000
MEAN	0.154	0.423	0.049	7.798	0.620	0.034	0.206	0.280	4.27	0.187	0.213	0.302	0.171	0.615	0.539
S. D.	0.095	0.161	0.014	3.300	0.290	0.006	0.122	0.121	1.53	0.055	0.145	0.223	0.062	0.264	0.144
LOW	0.020	0.250	0.030	3.250	0.330	0.030	0.095	0.060	2.75	0.060	0.060	0.060	0.105	0.130	0.250
HIGH	0.315	0.785	0.075	12.960	1.205	0.045	0.500	0.500	8.12	0.270	0.410	0.500	0.320	0.940	0.750

COD, PAC. (GRAY) GADUS MACROCEPHALUS 033007 AREA- ALASKA SITE- N6 LIVER

LENGTH NUM 5 MEAN 0.707 S. D. 0.042 LOW 0.645 HIGH 0.750
WEIGHT NUM 5 MEAN 3.221 S. D. 0.485 LOW 2.381 HIGH 3.629

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0000	0005	0005	0005	0005	0005	0004	0005	0004	0005	0005
N DET.	0002	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0005	0000	0000	0000
MEAN	0.047	0.506	0.376	3.729	0.000	0.066	0.192	3.075	22.54	0.252	0.383	0.000	2.010	0.550	0.442
S. D.	0.038	0.188	0.212	2.058	0.000	0.079	0.130	2.154	4.72	0.116	0.056	0.000	0.860	0.326	0.269
LOW	0.020	0.310	0.150	2.600	0.000	0.010	0.010	0.880	15.00	0.090	0.310	0.000	1.130	0.130	0.060
HIGH	0.090	0.750	0.700	7.400	0.000	0.190	0.330	5.090	26.72	0.410	0.440	0.000	3.190	0.940	0.750

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- I2 MUSCLE

LENGTH NUM 7 MEAN 0.871 S. D. 0.220 LOW 0.410 HIGH 1.040
WEIGHT NUM 1 MEAN 0.925 S. D. 0.000 LOW 0.925 HIGH 0.925

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0007	0006	0000	0000	0000
MEAN	0.222	0.409	0.061	5.374	0.501	0.034	0.174	0.212	3.84	0.169	0.000	0.190	0.124	0.563	0.431
S. D.	0.133	0.176	0.019	2.519	0.114	0.015	0.154	0.034	0.43	0.037	0.000	0.000	0.035	0.177	0.170
LOW	0.040	0.190	0.040	3.375	0.375	0.015	0.060	0.180	2.97	0.120	0.000	0.000	0.090	0.300	0.220
HIGH	0.430	0.750	0.090	9.300	0.720	0.060	0.440	0.270	4.38	0.210	0.000	0.190	0.180	0.750	0.690

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- I2 LIVER

LENGTH NUM 6 MEAN 0.948 S. D. 0.091 LOW 0.800 HIGH 1.040
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0005	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0005	0000	0000	0000	0000	0000	0001	0000	0000	0000	0003	0005	0000	0000	0000
MEAN	0.110	0.488	0.097	7.988	1.234	0.202	0.202	3.770	13.92	0.178	0.167	0.310	0.698	0.312	0.260
S. D.	0.000	0.313	0.067	5.882	0.851	0.231	0.242	2.829	5.50	0.082	0.072	0.000	0.478	0.171	0.196
LOW	0.000	0.060	0.050	2.300	0.600	0.010	0.060	0.970	6.50	0.090	0.120	0.000	0.210	0.120	0.060
HIGH	0.110	1.000	0.230	16.550	2.440	0.510	0.630	9.060	21.88	0.300	0.250	0.310	1.330	0.630	0.560

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- I3 MUSCLE

LENGTH NUM 2 MEAN 0.920 S. D. 0.198 LOW 0.780 HIGH 1.060
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.333	0.360	0.048	12.369	0.493	0.035	0.158	0.223	4.67	0.240	0.000	0.000	0.090	0.658	0.420
S. D.	0.364	0.156	0.004	11.588	0.110	0.007	0.039	0.138	0.41	0.000	0.000	0.000	0.042	0.131	0.071
LOW	0.075	0.250	0.045	4.175	0.415	0.030	0.130	0.125	4.38	0.240	0.000	0.000	0.060	0.565	0.370
HIGH	0.590	0.470	0.050	20.563	0.570	0.040	0.185	0.320	4.96	0.240	0.000	0.000	0.120	0.750	0.470

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- I3 LIVER

LENGTH NUM 2 MEAN 0.920 S. D. 0.198 LOW 0.780 HIGH 1.060
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.210	0.375	0.125	1.960	1.905	0.265	0.285	3.220	19.38	0.190	0.190	0.310	1.175	0.345	0.525
S. D.	0.000	0.346	0.021	0.000	0.375	0.262	0.134	2.079	6.19	0.071	0.042	0.000	1.039	0.403	0.304
LOW	0.000	0.130	0.110	0.000	1.640	0.080	0.190	1.750	15.00	0.140	0.160	0.000	0.440	0.060	0.310
HIGH	0.210	0.620	0.140	1.960	2.170	0.450	0.380	4.690	23.75	0.240	0.220	0.310	1.910	0.630	0.740

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- I7 MUSCLE

LENGTH NUM 11 MEAN 0.446 S. D. 0.101 LOW 0.416 HIGH 0.750
WEIGHT NUM 11 MEAN 0.839 S. D. 0.136 LOW 0.798 HIGH 1.249

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000	0006	0006	0000	0001	0001
MEAN	0.066	0.557	0.076	6.545	0.395	0.031	0.216	0.247	3.82	0.194	0.176	0.393	0.144	0.610	0.469
S. D.	0.033	0.523	0.047	2.297	0.198	0.007	0.139	0.090	1.30	0.056	0.073	0.215	0.040	0.206	0.117
LOW	0.020	0.130	0.020	4.282	0.150	0.020	0.060	0.060	2.25	0.100	0.060	0.185	0.070	0.310	0.220
HIGH	0.120	1.880	0.170	11.090	0.715	0.040	0.500	0.360	6.56	0.315	0.250	0.630	0.190	0.905	0.620

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- I7 LIVER

LENGTH NUM 2 MEAN 0.583 S. D. 0.236 LOW 0.416 HIGH 0.750
WEIGHT NUM 1 MEAN 0.798 S. D. 0.000 LOW 0.798 HIGH 0.798

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0000	0000	0000
MEAN	0.000	0.375	0.285	5.494	1.000	0.210	0.500	4.310	19.07	0.225	0.345	0.000	0.690	0.410	0.345
S. D.	0.000	0.177	0.177	1.636	0.325	0.085	0.000	0.000	5.75	0.007	0.049	0.000	0.141	0.042	0.049
LOW	0.000	0.250	0.160	4.337	0.770	0.150	0.000	0.000	15.00	0.220	0.310	0.000	0.590	0.380	0.310
HIGH	0.000	0.500	0.410	6.650	1.230	0.270	0.500	4.310	23.13	0.230	0.380	0.000	0.790	0.440	0.380

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- I9 MUSCLE

LENGTH NUM 1 MEAN 0.770 S. D. 0.000 LOW 0.770 HIGH 0.770
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.190	0.310	0.040	4.850	0.140	0.025	0.535	0.310	3.97	0.355	0.000	0.000	0.100	0.655	0.425
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.190	0.310	0.040	4.850	0.140	0.025	0.535	0.310	3.97	0.355	0.000	0.000	0.100	0.655	0.425

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- I9 LIVER

LENGTH NUM 1 MEAN 0.605 S. D. 0.000 LOW 0.605 HIGH 0.605
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.500	0.640	5.750	0.980	0.050	0.060	5.000	16.25	0.120	0.210	0.000	0.540	0.250	0.250
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.500	0.640	5.750	0.980	0.050	0.060	5.000	16.25	0.120	0.210	0.000	0.540	0.250	0.250

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- J4 LIVER

LENGTH NUM 1 MEAN 0.910 S. D. 0.000 LOW 0.910 HIGH 0.910
WEIGHT NUM 1 MEAN 9.072 S. D. 0.000 LOW 9.072 HIGH 9.072

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	0.000	0.430	0.140	0.000	0.950	0.360	0.080	6.430	15.36	0.820	0.150	0.000	0.530	0.000	0.280
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.430	0.140	0.000	0.950	0.360	0.080	6.430	15.36	0.820	0.150	0.000	0.530	0.000	0.280

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

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COD, ATL.                       GADUS MORHUA                    033008   AREA- NORTH ATLANTIC      SITE- J5   MUSCLE

LENGTH    NUM   1   MEAN     0.543   S. D.    0.000   LOW      0.543   HIGH      0.543
WEIGHT    NUM   0   MEAN     0.000   S. D.    0.000   LOW      0.000   HIGH      0.000
          MERCURY   LEAD  CADMIUM  ARSENIC SELENIUM  SILVER   CHROM   COPPER    ZINC  NICKEL   MOLYB VANADIUM    MANG ANTIMONY     TIN
            PPM      PPM     PPM      PPM     PPM      PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM     PPM      PPM

NUMBER     0001     0001    0001     0001    0001     0001    0001     0001    0001    0001     0001    0001     0001    0001     0001
N DET.     0000     0000    0000     0000    0000     0000    0000     0000    0000    0000     0001    0001     0000    0000     0000
MEAN      0.113    1.038   0.185    7.166   0.363    0.040   0.262    0.120    4.05   0.315    0.000   0.000    0.106   0.325    0.950
S. D.     0.000    0.000   0.000    0.000   0.000    0.000   0.000    0.000    0.00   0.000    0.000   0.000    0.000   0.000    0.000
LOW       0.000    0.000   0.000    0.000   0.000    0.000   0.000    0.000    0.00   0.000    0.000   0.000    0.000   0.000    0.000
HIGH      0.113    1.038   0.185    7.166   0.363    0.040   0.262    0.120    4.05   0.315    0.000   0.000    0.106   0.325    0.950

COD, ATL.                       GADUS MORHUA                    033008   AREA- NORTH ATLANTIC      SITE- J5   LIVER

LENGTH    NUM   1   MEAN     0.543   S. D.    0.000   LOW      0.543   HIGH      0.543
WEIGHT    NUM   0   MEAN     0.000   S. D.    0.000   LOW      0.000   HIGH      0.000
          MERCURY   LEAD  CADMIUM  ARSENIC SELENIUM  SILVER   CHROM   COPPER    ZINC  NICKEL   MOLYB VANADIUM    MANG ANTIMONY     TIN
            PPM      PPM     PPM      PPM     PPM      PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM     PPM      PPM

NUMBER     0001     0001    0001     0001    0001     0001    0001     0001    0001    0001     0001    0001     0001    0001     0001
N DET.     0000     0000    0000     0000    0000     0000    0000     0000    0000    0000     0000    0001     0000    0000     0001
MEAN      0.080    0.360   0.370    5.760   1.050    0.810   0.115   10.000   31.87   0.810    0.270   0.000    1.190   0.300    0.000
S. D.     0.000    0.000   0.000    0.000   0.000    0.000   0.000    0.000    0.00   0.000    0.000   0.000    0.000   0.000    0.000
LOW       0.000    0.000   0.000    0.000   0.000    0.000   0.000    0.000    0.00   0.000    0.000   0.000    0.000   0.000    0.000
HIGH      0.080    0.360   0.370    5.760   1.050    0.810   0.115   10.000   31.87   0.810    0.270   0.000    1.190   0.300    0.000

COD, ATL.                       GADUS MORHUA                    033008   AREA- NORTH ATLANTIC      SITE- J6   MUSCLE

LENGTH    NUM  14   MEAN     0.641   S. D.    0.122   LOW      0.520   HIGH      0.920
WEIGHT    NUM   4   MEAN     4.144   S. D.    2.756   LOW      1.436   HIGH      7.938
          MERCURY   LEAD  CADMIUM  ARSENIC SELENIUM  SILVER   CHROM   COPPER    ZINC  NICKEL   MOLYB VANADIUM    MANG ANTIMONY     TIN
            PPM      PPM     PPM      PPM     PPM      PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM     PPM      PPM

NUMBER     0014     0014    0014     0014    0013     0014    0014     0014    0014    0014     0014    0014     0014    0014     0014
N DET.     0000     0000    0002     0000    0000     0003    0001     0000    0000    0001     0014    0012     0000    0000     0000
MEAN      0.105    0.452   0.052    4.755   0.444    0.030   0.198    0.325    3.42   0.222    0.000   0.295    0.134   0.657    0.456
S. D.     0.056    0.235   0.020    2.192   0.081    0.011   0.212    0.259    0.26   0.072    0.000   0.064    0.042   0.234    0.175
LOW       0.020    0.180   0.030    0.750   0.325    0.010   0.060    0.130    3.06   0.120    0.000   0.250    0.060   0.120    0.100
HIGH      0.230    1.050   0.100    8.650   0.575    0.050   0.756    1.110    3.78   0.390    0.000   0.340    0.215   1.200    0.820

COD, ATL.                       GADUS MORHUA                    033008   AREA- NORTH ATLANTIC      SITE- J6   LIVER

LENGTH    NUM   3   MEAN     0.801   S. D.    0.143   LOW      0.643   HIGH      0.920
WEIGHT    NUM   2   MEAN     5.528   S. D.    3.408   LOW      3.118   HIGH      7.938
          MERCURY   LEAD  CADMIUM  ARSENIC SELENIUM  SILVER   CHROM   COPPER    ZINC  NICKEL   MOLYB VANADIUM    MANG ANTIMONY     TIN
            PPM      PPM     PPM      PPM     PPM      PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM     PPM      PPM

NUMBER     0003     0003    0003     0002    0002     0003    0003     0003    0003    0003     0003    0003     0003    0003     0002
N DET.     0002     0000    0000     0000    0000     0000    0001     0000    0000    0000     0001    0002     0000    0000     0001
MEAN      0.040    0.404   0.623    4.098   0.845    0.113   0.155    6.972   16.20   0.157    0.395   0.190    0.668   0.542    0.250
S. D.     0.000    0.137   0.715    1.128   0.346    0.121   0.148    4.725    8.14   0.127    0.318   0.000    0.302   0.477    0.000
LOW       0.000    0.253   0.110    3.300   0.600    0.020   0.050    3.260    8.62   0.010    0.170   0.000    0.340   0.090    0.000
HIGH      0.040    0.520   1.440    4.895   1.090    0.250   0.260   12.290   24.80   0.240    0.620   0.190    0.935   1.040    0.250

COD, ATL.                       GADUS MORHUA                    033008   AREA- NORTH ATLANTIC      SITE- J7   MUSCLE

LENGTH    NUM  15   MEAN     0.430   S. D.    0.042   LOW      0.324   HIGH      0.480
WEIGHT    NUM  15   MEAN     0.860   S. D.    0.240   LOW      0.362   HIGH      1.158
          MERCURY   LEAD  CADMIUM  ARSENIC SELENIUM  SILVER   CHROM   COPPER    ZINC  NICKEL   MOLYB VANADIUM    MANG ANTIMONY     TIN
            PPM      PPM     PPM      PPM     PPM      PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM     PPM      PPM

NUMBER     0015     0014    0014     0015    0015     0015    0014     0014    0014    0015     0015    0015     0015    0015     0013
N DET.     0006     0000    0000     0000    0000     0001    0000     0000    0000    0000     0014    0014     0000    0002     0000
MEAN      0.121    0.336   0.078    3.979   0.316    0.033   0.142    0.258    3.77   0.239    0.190   0.380    0.210   0.743    0.519
S. D.     0.104    0.146   0.042    1.822   0.080    0.010   0.055    0.127    0.55   0.085    0.000   0.000    0.197   0.227    0.197
LOW       0.020    0.080   0.030    0.900   0.150    0.020   0.060    0.080    2.81   0.100    0.000   0.000    0.060   0.470    0.380
HIGH      0.300    0.595   0.210    7.066   0.470    0.050   0.285    0.510    4.59   0.380    0.190   0.380    0.700   1.190    1.130

COD, ATL.                       GADUS MORHUA                    033008   AREA- NORTH ATLANTIC      SITE- J7   LIVER

LENGTH    NUM   1   MEAN     1.050   S. D.    0.000   LOW      1.050   HIGH      1.050
WEIGHT    NUM   1   MEAN    14.969   S. D.    0.000   LOW     14.969   HIGH     14.969
          MERCURY   LEAD  CADMIUM  ARSENIC SELENIUM  SILVER   CHROM   COPPER    ZINC  NICKEL   MOLYB VANADIUM    MANG ANTIMONY     TIN
            PPM      PPM     PPM      PPM     PPM      PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM     PPM      PPM

NUMBER     0001     0001    0001     0001    0001     0001    0001     0001    0001    0001     0001    0001     0001    0001     0001
N DET.     0000     0000    0000     0000    0000     0000    0000     0000    0000    0000     0000    0000     0000    0000     0000
MEAN      0.040    0.500   0.425    1.926   0.900    0.020   0.120    0.865   17.06   0.155    0.495   0.120    0.585   0.720    0.545
S. D.     0.000    0.000   0.000    0.000   0.000    0.000   0.000    0.000    0.00   0.000    0.000   0.000    0.000   0.000    0.000
LOW       0.000    0.000   0.000    0.000   0.000    0.000   0.000    0.000    0.00   0.000    0.000   0.000    0.000   0.000    0.000
HIGH      0.040    0.500   0.425    1.926   0.900    0.020   0.120    0.865   17.06   0.155    0.495   0.120    0.585   0.720    0.545

COD, ATL.                       GADUS MORHUA                    033008   AREA- NORTH ATLANTIC      SITE- J8   MUSCLE

LENGTH    NUM  18   MEAN     0.632   S. D.    0.148   LOW      0.404   HIGH      1.040
WEIGHT    NUM  14   MEAN     2.846   S. D.    1.489   LOW      0.735   HIGH      5.840
          MERCURY   LEAD  CADMIUM  ARSENIC SELENIUM  SILVER   CHROM   COPPER    ZINC  NICKEL   MOLYB VANADIUM    MANG ANTIMONY     TIN
            PPM      PPM     PPM      PPM     PPM      PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM     PPM      PPM

NUMBER     0018     0018    0018     0017    0017     0018    0018     0017    0018    0018     0018    0018     0017    0018     0017
N DET.     0001     0001    0001     0000    0000     0003    0000     0000    0000    0001     0012    0014     0000    0001     0000
MEAN      0.098    0.373   0.057    5.185   0.315    0.051   0.134    0.198    3.93   0.231    0.358   0.108    0.132   0.722    0.576
S. D.     0.048    0.137   0.025    3.688   0.130    0.043   0.084    0.074    1.46   0.129    0.348   0.032    0.052   0.219    0.165
LOW       0.020    0.190   0.025    1.725   0.130    0.020   0.030    0.030    1.06   0.040    0.060   0.060    0.060   0.380    0.315
HIGH      0.210    0.685   0.120   17.183   0.560    0.180   0.325    0.310    7.50   0.460    0.870   0.130    0.240   1.080    0.910
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- J8 LIVER

LENGTH NUM 4 MEAN 0.764 S. D. 0.184 LOW 0.663 HIGH 1.040
WEIGHT NUM 1 MEAN 3.629 S. D. 0.000 LOW 3.629 HIGH 3.629

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0002	0000	0000	0000	0000	0000	0001	0000	0000	0001	0002	0004	0000	0000	0000
MEAN	0.158	0.549	0.105	5.362	0.696	0.185	0.087	5.850	15.67	0.107	0.225	0.000	0.398	0.553	0.398
S. D.	0.145	0.415	0.062	2.640	0.305	0.129	0.023	5.691	13.57	0.059	0.049	0.000	0.278	0.574	0.397
LOW	0.055	0.150	0.040	3.700	0.250	0.010	0.060	1.570	4.40	0.040	0.190	0.000	0.140	0.190	0.060
HIGH	0.260	1.120	0.180	9.300	0.940	0.320	0.100	14.210	35.36	0.150	0.260	0.000	0.780	1.410	0.900

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- K2 MUSCLE

LENGTH NUM 8 MEAN 0.712 S. D. 0.216 LOW 0.434 HIGH 1.020
WEIGHT NUM 3 MEAN 1.087 S. D. 0.289 LOW 0.782 HIGH 1.358

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0000	0000	0001	0000	0000	0002	0000	0000	0000	0000	0005	0005	0000	0001	0000
MEAN	0.074	0.334	0.052	3.423	0.632	0.044	0.119	0.218	4.25	0.210	0.333	0.360	0.159	0.959	0.763
S. D.	0.065	0.140	0.011	1.611	0.244	0.010	0.052	0.085	0.95	0.077	0.239	0.375	0.047	0.313	0.424
LOW	0.020	0.155	0.036	1.100	0.345	0.030	0.060	0.030	3.47	0.126	0.060	0.060	0.075	0.580	0.390
HIGH	0.195	0.500	0.070	6.133	1.040	0.060	0.205	0.280	6.23	0.360	0.500	0.780	0.205	1.500	1.750

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- K2 LIVER

LENGTH NUM 6 MEAN 0.791 S. D. 0.186 LOW 0.465 HIGH 1.020
WEIGHT NUM 1 MEAN 1.032 S. D. 0.000 LOW 1.032 HIGH 1.032

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0005	0004	0006	0006	0006	0006	0006	0006	0006	0006	0005	0006
N DET.	0005	0000	0001	0000	0000	0001	0000	0000	0000	0001	0001	0005	0000	0001	0000
MEAN	0.010	0.435	0.161	3.674	0.810	0.072	0.191	3.690	13.33	0.244	0.264	0.400	0.500	0.355	0.309
S. D.	0.000	0.217	0.098	3.176	0.233	0.058	0.137	1.282	3.86	0.159	0.156	0.000	0.213	0.124	0.325
LOW	0.000	0.250	0.040	0.300	0.520	0.010	0.040	2.120	8.21	0.090	0.100	0.000	0.220	0.200	0.060
HIGH	0.010	0.850	0.290	8.020	1.040	0.130	0.400	5.750	17.85	0.510	0.500	0.400	0.800	0.500	0.890

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- N2 MUSCLE

LENGTH NUM 7 MEAN 0.589 S. D. 0.089 LOW 0.510 HIGH 0.780
WEIGHT NUM 7 MEAN 1.994 S. D. 0.370 LOW 1.362 HIGH 2.270

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0010	0009	0000	0010	0000
MEAN	0.168	0.456	0.068	2.649	0.386	0.034	0.434	0.263	4.44	0.234	0.190	0.140	0.187	0.410	0.509
S. D.	0.166	0.201	0.024	1.673	0.147	0.009	0.280	0.109	1.41	0.032	0.000	0.113	0.076	0.000	0.103
LOW	0.060	0.190	0.040	0.100	0.145	0.020	0.125	0.080	2.75	0.180	0.000	0.060	0.080	0.000	0.370
HIGH	0.580	0.810	0.130	6.125	0.600	0.050	0.815	0.510	7.75	0.280	0.190	0.220	0.320	0.410	0.690

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- N2 LIVER

LENGTH NUM 4 MEAN 0.605 S. D. 0.120 LOW 0.510 HIGH 0.780
WEIGHT NUM 3 MEAN 1.835 S. D. 0.418 LOW 1.362 HIGH 2.157

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0002	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000	0004	0000	0004	0000
MEAN	0.057	0.313	0.252	3.246	0.751	0.076	0.167	4.360	16.60	0.328	0.252	0.250	0.662	0.440	0.360
S. D.	0.064	0.102	0.229	1.490	0.339	0.094	0.097	2.338	6.28	0.217	0.114	0.000	0.238	0.000	0.063
LOW	0.020	0.190	0.130	1.720	0.260	0.010	0.060	2.060	6.85	0.130	0.130	0.000	0.290	0.000	0.250
HIGH	0.130	0.440	0.660	5.225	1.100	0.240	0.250	8.050	21.88	0.610	0.410	0.250	0.910	0.440	0.410

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

LENGTH NUM 5 MEAN 0.606 S. D. 0.104 LOW 0.448 HIGH 0.735
WEIGHT NUM 4 MEAN 3.204 S. D. 1.329 LOW 2.155 HIGH 5.103

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0004	0000	0000	0000
MEAN	0.109	0.612	0.067	4.373	0.496	0.029	0.145	0.266	4.29	0.212	0.000	0.280	0.146	0.664	0.503
S. D.	0.047	0.341	0.037	1.788	0.125	0.011	0.087	0.064	0.53	0.029	0.000	0.000	0.040	0.219	0.215
LOW	0.030	0.280	0.035	3.231	0.330	0.010	0.060	0.175	3.69	0.180	0.000	0.000	0.115	0.440	0.220
HIGH	0.150	1.060	0.130	7.500	0.620	0.035	0.285	0.325	5.12	0.255	0.000	0.280	0.215	0.965	0.690

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- O2 MUSCLE

LENGTH NUM 10 MEAN 0.547 S. D. 0.060 LOW 0.481 HIGH 0.675
WEIGHT NUM 10 MEAN 1.691 S. D. 0.506 LOW 1.204 HIGH 2.749

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0009	0010	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0000	0000	0001	0000	0000	0001	0001	0000	0000	0000	0008	0005	0000	0000	0000
MEAN	0.097	0.396	0.051	5.326	0.330	0.026	0.122	0.233	3.41	0.213	0.060	0.203	0.125	0.600	0.590
S. D.	0.054	0.243	0.020	2.691	0.184	0.014	0.049	0.091	1.36	0.065	0.000	0.167	0.073	0.278	0.845
LOW	0.020	0.120	0.020	2.050	0.140	0.010	0.070	0.080	0.87	0.140	0.000	0.060	0.030	0.060	0.250
HIGH	0.205	0.810	0.075	9.500	0.780	0.050	0.200	0.340	5.47	0.350	0.060	0.380	0.270	0.905	2.930

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- 03 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	10	0.636	0.287	0.328	1.140
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0007	0000	0000	0000
MEAN	0.120	0.488	0.061	5.094	0.422	0.041	0.148	0.282	4.92	0.211	0.190	0.238	0.154	0.742	0.552
S. D.	0.095	0.247	0.021	1.968	0.128	0.021	0.060	0.120	1.69	0.052	0.000	0.113	0.082	0.252	0.126
LOW	0.030	0.250	0.020	1.600	0.220	0.020	0.060	0.100	0.94	0.120	0.190	0.040	0.040	0.190	0.330
HIGH	0.340	1.000	0.100	8.300	0.590	0.080	0.250	0.485	7.88	0.330	0.190	0.310	0.325	1.130	0.810

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- 03 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	3	0.887	0.260	0.620	1.140
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0001	0000
MEAN	0.020	0.490	0.245	5.994	0.805	0.323	0.187	6.617	15.45	0.180	0.175	0.310	0.525	0.198	0.325
S. D.	0.000	0.205	0.157	3.985	0.106	0.474	0.125	3.816	3.16	0.044	0.021	0.000	0.200	0.095	0.110
LOW	0.020	0.280	0.115	3.157	0.730	0.020	0.060	2.290	11.97	0.150	0.160	0.000	0.345	0.130	0.220
HIGH	0.020	0.690	0.420	10.550	0.880	0.870	0.310	9.500	18.13	0.230	0.190	0.310	0.740	0.265	0.440

COD, ATL. GADUS MORHUA 033008 AREA- NORTH ATLANTIC SITE- P1 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.690	0.000	0.690	0.690
WEIGHT	1	7.258	0.000	7.258	7.258

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0000	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.000	0.690	0.180	2.750	0.850	0.120	0.130	8.630	26.25	0.210	0.000	0.090	0.000	0.690	0.220
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.690	0.180	2.750	0.850	0.120	0.130	8.630	26.25	0.210	0.000	0.090	0.000	0.690	0.220

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- E9 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	13	0.276	0.024	0.232	0.313
WEIGHT	13	0.223	0.059	0.122	0.337

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013
N DET.	0003	0000	0001	0000	0000	0001	0000	0000	0000	0000	0011	0006	0000	0001	0000
MEAN	0.050	0.382	0.073	9.383	0.653	0.037	0.125	0.247	3.57	0.213	0.125	0.350	0.414	0.623	0.418
S. D.	0.030	0.121	0.065	3.396	0.106	0.005	0.071	0.042	0.58	0.036	0.092	0.079	0.237	0.107	0.105
LOW	0.020	0.190	0.020	4.625	0.480	0.029	0.060	0.190	2.88	0.130	0.060	0.240	0.090	0.440	0.280
HIGH	0.110	0.630	0.275	15.400	0.800	0.040	0.310	0.320	4.94	0.260	0.190	0.440	1.000	0.750	0.626

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- I9 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.710	0.000	0.710	0.710
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.070	0.298	0.045	8.659	0.675	0.030	0.198	0.150	3.23	0.183	0.000	0.000	0.130	0.565	0.400
S. D.	0.028	0.018	0.021	2.498	0.205	0.014	0.166	0.141	0.82	0.018	0.000	0.000	0.000	0.092	0.057
LOW	0.050	0.285	0.030	6.893	0.530	0.020	0.080	0.050	2.65	0.170	0.000	0.000	0.130	0.500	0.360
HIGH	0.090	0.310	0.060	10.425	0.820	0.040	0.315	0.250	3.81	0.195	0.000	0.000	0.130	0.630	0.440

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- I9 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.710	0.000	0.710	0.710
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	0.130	0.140	3.400	1.900	0.040	0.160	2.060	18.00	0.230	0.130	0.750	0.750	0.630	0.190
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.130	0.140	3.400	1.900	0.040	0.160	2.060	18.00	0.230	0.130	0.750	0.750	0.630	0.190

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- J5 WHOLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.030	0.325	0.000	29.800	1.180	0.000	0.045	0.610	2.50	0.250	0.000	0.000	0.430	0.000	0.390
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.030	0.325	0.000	29.800	1.180	0.000	0.045	0.610	2.50	0.250	0.000	0.000	0.430	0.000	0.390

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

REPORT MF17

LOCATION LEVEL 5

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- J5 MUSCLE

LENGTH NUM 10 MEAN 0.637 S. D. 0.042 LOW 0.550 HIGH 0.680
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0003	0000	0000	0000	0000	0009	0007	0000	0001	0000
MEAN	0.133	0.370	0.054	8.508	0.603	0.026	0.076	0.197	3.45	0.215	0.060	0.187	0.220	0.595	0.417
S. D.	0.083	0.087	0.014	3.945	0.197	0.010	0.029	0.054	0.64	0.054	0.000	0.125	0.131	0.261	0.073
LOW	0.030	0.250	0.040	3.912	0.330	0.010	0.060	0.120	2.59	0.125	0.000	0.060	0.095	0.370	0.340
HIGH	0.300	0.500	0.075	16.550	0.900	0.040	0.130	0.280	4.56	0.310	0.060	0.310	0.510	1.060	0.560

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- J5 LIVER

LENGTH NUM 8 MEAN 0.655 S. D. 0.020 LOW 0.630 HIGH 0.680
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0007	0006	0003	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0008	0000	0000	0000	0000	0001	0002	0000	0000	0000	0003	0001	0000	0001	0000
MEAN	0.000	0.401	0.354	28.744	1.549	0.057	0.067	4.515	14.15	0.544	0.112	2.066	1.716	0.404	0.281
S. D.	0.000	0.177	0.082	19.647	0.742	0.041	0.010	1.870	4.00	0.190	0.054	1.618	1.490	0.121	0.087
LOW	0.000	0.130	0.230	5.750	0.885	0.010	0.060	3.130	6.94	0.310	0.060	0.470	0.360	0.250	0.190
HIGH	0.000	0.630	0.450	48.000	2.350	0.130	0.080	8.380	20.40	0.810	0.190	4.440	5.040	0.630	0.440

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- J6 MUSCLE

LENGTH NUM 6 MEAN 0.476 S. D. 0.032 LOW 0.433 HIGH 0.530
WEIGHT NUM 6 MEAN 1.189 S. D. 0.275 LOW 0.813 HIGH 1.644

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0005	0005	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0002	0000	0001	0000
MEAN	0.037	0.469	0.077	5.174	0.485	0.048	0.232	0.183	3.63	0.224	0.268	0.150	0.218	0.924	0.553
S. D.	0.016	0.101	0.023	3.441	0.118	0.028	0.135	0.063	0.65	0.035	0.143	0.096	0.078	0.361	0.107
LOW	0.020	0.315	0.055	2.685	0.403	0.020	0.076	0.070	3.00	0.185	0.120	0.060	0.110	0.690	0.425
HIGH	0.055	0.610	0.120	10.900	0.675	0.095	0.480	0.240	4.59	0.265	0.500	0.280	0.325	1.555	0.720

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- J6 LIVER

LENGTH NUM 1 MEAN 0.465 S. D. 0.000 LOW 0.465 HIGH 0.465
WEIGHT NUM 1 MEAN 1.095 S. D. 0.000 LOW 1.095 HIGH 1.095

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	0.000	0.800	0.140	9.200	1.590	0.070	0.200	6.360	9.71	0.110	0.300	0.000	0.750	0.000	0.270
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.800	0.140	9.200	1.590	0.070	0.200	6.360	9.71	0.110	0.300	0.000	0.750	0.000	0.270

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- J8 MUSCLE

LENGTH NUM 25 MEAN 0.631 S. D. 0.122 LOW 0.332 HIGH 0.860
WEIGHT NUM 16 MEAN 2.294 S. D. 1.110 LOW 0.737 HIGH 5.046

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0026	0026	0026	0025	0026	0026	0026	0026	0026	0026	0026	0026	0026	0026	0025
N DET.	0002	0000	0001	0000	0000	0004	0002	0000	0000	0000	0017	0019	0000	0000	0000
MEAN	0.098	0.393	0.057	6.006	0.365	0.032	0.109	0.239	3.17	0.230	0.212	0.429	0.171	0.686	0.485
S. D.	0.057	0.296	0.018	3.288	0.182	0.015	0.045	0.102	0.76	0.179	0.127	0.253	0.088	0.352	0.218
LOW	0.040	0.100	0.025	1.975	0.080	0.010	0.030	0.090	1.31	0.060	0.060	0.075	0.060	0.130	0.060
HIGH	0.250	1.500	0.100	15.740	0.775	0.075	0.190	0.510	4.56	0.860	0.500	0.780	0.500	1.500	1.000

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- J8 LIVER

LENGTH NUM 3 MEAN 0.728 S. D. 0.128 LOW 0.605 HIGH 0.860
WEIGHT NUM 1 MEAN 2.826 S. D. 0.000 LOW 2.826 HIGH 2.826

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001
MEAN	0.000	0.273	0.177	7.803	1.162	0.070	0.210	3.082	8.26	0.282	0.440	0.337	0.430	0.515	0.290
S. D.	0.000	0.095	0.172	5.283	0.175	0.062	0.095	1.913	4.87	0.083	0.165	0.111	0.256	0.332	0.163
LOW	0.000	0.165	0.040	4.580	0.980	0.020	0.130	1.145	3.14	0.195	0.250	0.220	0.265	0.280	0.175
HIGH	0.000	0.345	0.370	13.900	1.330	0.140	0.315	4.970	12.84	0.360	0.540	0.440	0.725	0.750	0.405

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- J9 MUSCLE

LENGTH NUM 3 MEAN 0.551 S. D. 0.285 LOW 0.223 HIGH 0.740
WEIGHT NUM 1 MEAN 0.126 S. D. 0.000 LOW 0.126 HIGH 0.126

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.102	0.580	0.123	4.900	0.481	0.033	0.187	0.289	3.85	0.240	0.000	0.000	0.133	0.705	0.471
S. D.	0.059	0.071	0.075	3.305	0.201	0.006	0.077	0.049	1.15	0.118	0.000	0.000	0.051	0.095	0.077
LOW	0.066	0.530	0.050	2.700	0.350	0.030	0.100	0.233	3.10	0.140	0.000	0.000	0.090	0.625	0.420
HIGH	0.170	0.630	0.200	8.700	0.713	0.040	0.245	0.325	5.18	0.370	0.000	0.000	0.190	0.810	0.560

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- J9 LIVER

LENGTH NUM 2 MEAN 0.470 S. D. 0.349 LOW 0.223 HIGH 0.717
WEIGHT NUM 1 MEAN 0.126 S. D. 0.000 LOW 0.126 HIGH 0.126

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0001
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.595	0.370	18.025	1.700	0.040	0.090	4.840	14.10	0.405	0.235	0.340	0.875	0.785	0.840
S. D.	0.000	0.304	0.071	3.712	0.141	0.014	0.085	2.164	0.05	0.049	0.106	0.000	0.177	0.219	0.000
LOW	0.000	0.380	0.320	15.400	1.600	0.030	0.030	3.310	14.06	0.370	0.160	0.000	0.750	0.630	0.000
HIGH	0.000	0.810	0.420	20.650	1.800	0.050	0.150	6.370	14.13	0.440	0.310	0.340	1.000	0.940	0.840

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- K3 MUSCLE

LENGTH NUM 2 MEAN 0.450 S. D. 0.045 LOW 0.418 HIGH 0.482
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.038	0.288	0.075	2.940	0.623	0.035	0.123	0.360	4.83	0.270	0.000	0.190	0.185	1.105	0.468
S. D.	0.018	0.032	0.007	2.744	0.145	0.007	0.088	0.113	2.50	0.014	0.000	0.000	0.064	0.318	0.230
LOW	0.025	0.265	0.070	1.000	0.520	0.030	0.060	0.280	3.06	0.260	0.000	0.000	0.140	0.880	0.305
HIGH	0.050	0.310	0.080	4.880	0.725	0.040	0.185	0.440	6.60	0.280	0.000	0.190	0.230	1.330	0.630

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- K4 MUSCLE

LENGTH NUM 5 MEAN 0.298 S. D. 0.081 LOW 0.242 HIGH 0.440
WEIGHT NUM 5 MEAN 0.310 S. D. 0.261 LOW 0.154 HIGH 0.772

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0003	0000	0000	0000
MEAN	0.065	0.425	0.058	5.736	0.738	0.032	0.091	0.281	3.83	0.269	0.000	0.160	0.261	0.486	0.489
S. D.	0.051	0.100	0.022	1.786	0.225	0.011	0.051	0.068	0.50	0.084	0.000	0.042	0.061	0.260	0.191
LOW	0.020	0.310	0.030	3.850	0.430	0.020	0.045	0.190	3.16	0.155	0.000	0.130	0.180	0.130	0.340
HIGH	0.130	0.560	0.090	7.700	1.050	0.040	0.160	0.360	4.30	0.380	0.000	0.190	0.340	0.860	0.810

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- K7 MUSCLE

LENGTH NUM 1 MEAN 0.610 S. D. 0.000 LOW 0.610 HIGH 0.610
WEIGHT NUM 1 MEAN 2.552 S. D. 0.000 LOW 2.552 HIGH 2.552

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.210	0.176	0.000	33.750	0.475	0.000	0.136	0.500	3.82	1.155	0.000	0.200	0.320	0.910	0.460
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.210	0.176	0.000	33.750	0.475	0.000	0.136	0.500	3.82	1.155	0.000	0.200	0.320	0.910	0.460

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- K7 LIVER

LENGTH NUM 1 MEAN 0.445 S. D. 0.000 LOW 0.445 HIGH 0.445
WEIGHT NUM 1 MEAN 2.009 S. D. 0.000 LOW 2.009 HIGH 2.009

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.000	0.166	0.210	25.666	2.240	0.125	0.240	4.730	18.15	0.410	0.345	2.065	0.835	0.000	0.240
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.166	0.210	25.666	2.240	0.125	0.240	4.730	18.15	0.410	0.345	2.065	0.835	0.000	0.240

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- 03 MUSCLE

LENGTH NUM 9 MEAN 0.621 S. D. 0.139 LOW 0.440 HIGH 0.780
WEIGHT NUM 5 MEAN 1.815 S. D. 1.224 LOW 0.883 HIGH 3.345

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0006	0000	0000	0000
MEAN	0.105	0.316	0.051	6.210	0.516	0.035	0.251	0.256	3.46	0.236	0.123	0.273	0.187	0.601	0.604
S. D.	0.056	0.083	0.008	1.951	0.267	0.014	0.230	0.107	0.81	0.086	0.085	0.311	0.086	0.185	0.177
LOW	0.020	0.190	0.040	3.745	0.250	0.020	0.060	0.180	2.31	0.145	0.060	0.060	0.090	0.310	0.345
HIGH	0.185	0.470	0.065	9.500	0.980	0.060	0.750	0.530	5.09	0.440	0.220	0.630	0.370	0.880	0.970

HADDOCK MELANOGRAMMUS AEGLEFINUS 033011 AREA- NORTH ATLANTIC SITE- 03 LIVER

LENGTH NUM 2 MEAN 0.743 S. D. 0.032 LOW 0.720 HIGH 0.765
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.030	0.578	0.160	28.504	2.365	0.160	0.060	3.528	13.79	0.370	0.250	0.875	0.928	0.470	0.305
S. D.	0.000	0.194	0.099	22.374	1.407	0.000	0.000	0.576	5.36	0.184	0.000	0.969	0.187	0.396	0.021
LOW	0.000	0.440	0.090	12.683	1.370	0.000	0.060	3.120	10.00	0.240	0.000	0.190	0.795	0.190	0.290
HIGH	0.030	0.715	0.230	44.325	3.360	0.160	0.060	3.935	17.58	0.500	0.250	1.560	1.060	0.750	0.320

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- I2 MUSCLE

LENGTH	NUM	2	MEAN	0.232	S. D.	0.014	LOW	0.222	HIGH	0.242
WEIGHT	NUM	2	MEAN	0.117	S. D.	0.031	LOW	0.095	HIGH	0.139

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.000	0.473	0.053	5.262	0.558	0.030	0.065	0.488	3.10	0.273	0.310	0.130	0.193	0.673	0.593
S. D.	0.000	0.484	0.018	0.318	0.081	0.000	0.007	0.286	0.22	0.074	0.000	0.000	0.060	0.067	0.308
LOW	0.000	0.130	0.040	5.037	0.500	0.030	0.060	0.285	2.94	0.220	0.000	0.000	0.150	0.625	0.375
HIGH	0.000	0.815	0.065	5.487	0.615	0.030	0.070	0.690	3.25	0.325	0.310	0.130	0.235	0.720	0.810

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- J1 MUSCLE

LENGTH	NUM	2	MEAN	0.201	S. D.	0.081	LOW	0.144	HIGH	0.258
WEIGHT	NUM	2	MEAN	0.061	S. D.	0.062	LOW	0.017	HIGH	0.105

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.020	0.595	0.073	7.247	0.573	0.073	0.410	0.185	5.25	0.403	0.253	0.405	0.833	1.000	0.920
S. D.	0.000	0.403	0.046	0.066	0.004	0.060	0.396	0.177	2.74	0.173	0.088	0.000	0.767	0.438	0.594
LOW	0.000	0.310	0.040	7.200	0.570	0.030	0.130	0.060	3.31	0.280	0.190	0.000	0.290	0.690	0.500
HIGH	0.020	0.880	0.105	7.293	0.575	0.115	0.690	0.310	7.19	0.525	0.315	0.405	1.375	1.310	1.340

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- K3 MUSCLE

LENGTH	NUM	5	MEAN	0.583	S. D.	0.041	LOW	0.530	HIGH	0.630
WEIGHT	NUM	5	MEAN	1.565	S. D.	0.373	LOW	1.077	HIGH	1.871

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0001	0001	0000	0000	0001	0000	0000	0000	0000	0004	0004	0000	0001	0000
MEAN	0.067	0.479	0.055	7.423	0.631	0.033	0.302	0.268	3.53	0.351	0.130	0.060	0.102	0.728	0.574
S. D.	0.019	0.125	0.019	1.779	0.128	0.010	0.247	0.140	0.43	0.077	0.000	0.000	0.034	0.471	0.391
LOW	0.040	0.332	0.040	5.000	0.470	0.020	0.140	0.145	2.88	0.240	0.000	0.000	0.055	0.300	0.250
HIGH	0.085	0.635	0.080	9.070	0.780	0.040	0.740	0.435	3.87	0.455	0.130	0.060	0.140	1.250	1.250

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- K3 LIVER

LENGTH	NUM	2	MEAN	0.620	S. D.	0.014	LOW	0.610	HIGH	0.630
WEIGHT	NUM	2	MEAN	1.843	S. D.	0.040	LOW	1.814	HIGH	1.871

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0001	0001	0000	0000	0000	0000	0002	0000	0000	0000
MEAN	0.000	0.220	0.085	6.150	0.915	0.020	0.060	4.425	78.13	0.165	0.250	0.000	1.265	0.530	0.380
S. D.	0.000	0.042	0.035	5.233	0.092	0.000	0.000	0.955	15.46	0.007	0.085	0.000	0.021	0.311	0.000
LOW	0.000	0.190	0.060	2.450	0.850	0.000	0.000	3.750	67.19	0.160	0.190	0.000	1.250	0.310	0.380
HIGH	0.000	0.250	0.110	9.850	0.980	0.020	0.060	5.100	89.06	0.170	0.310	0.000	1.280	0.750	0.380

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- K7 MUSCLE

LENGTH	NUM	16	MEAN	0.260	S. D.	0.02[illegible]	LOW	0.222	HIGH	0.309
WEIGHT	NUM	15	MEAN	0.126	S. D.	0.024	LOW	0.091	HIGH	0.178

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0016	0015	0014	0016	0015	0016	0015	0016	0016	0016	0016	0015	0016	0016	0015
N DET.	0007	0000	0000	0000	0000	0000	0001	0000	0000	0000	0011	0007	0000	0000	0000
MEAN	0.036	0.416	0.055	4.604	0.551	0.041	0.159	0.358	3.63	0.251	0.136	0.166	0.189	0.691	0.542
S. D.	0.018	0.145	0.016	1.515	0.290	0.019	0.063	0.263	1.49	0.106	0.112	0.130	0.114	0.184	0.167
LOW	0.020	0.250	0.030	2.550	0.100	0.010	0.060	0.110	0.12	0.090	0.060	0.040	0.020	0.440	0.295
HIGH	0.065	0.715	0.085	7.783	1.210	0.080	0.310	1.250	5.81	0.580	0.310	0.440	0.420	1.060	0.880

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

LENGTH	NUM	5	MEAN	0.314	S. D.	0.031	LOW	0.286	HIGH	0.363
WEIGHT	NUM	5	MEAN	0.222	S. D.	0.077	LOW	0.154	HIGH	0.347

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0004
N DET.	0002	0000	0000	0000	0000	0001	0000	0000	0000	0000	0004	0004	0000	0000	0000
MEAN	0.120	0.376	0.075	9.186	0.451	0.030	0.187	0.223	3.59	0.165	0.135	0.280	0.208	0.567	0.506
S. D.	0.139	0.136	0.028	3.302	0.094	0.007	0.249	0.067	0.26	0.067	0.000	0.000	0.080	0.101	0.105
LOW	0.030	0.220	0.060	6.163	0.350	0.025	0.060	0.120	3.31	0.080	0.000	0.000	0.150	0.440	0.[illegible]25
HIGH	0.280	0.520	0.125	14.500	0.600	0.040	0.630	0.290	3.99	0.235	0.135	0.280	0.340	0.690	0.660

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- N5 MUSCLE

LENGTH	NUM	18	MEAN	0.321	S. D.	0.043	LOW	0.229	HIGH	0.430
WEIGHT	NUM	18	MEAN	0.309	S. D.	0.155	LOW	0.190	HIGH	0.848

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0018	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0014	0013	0000	0000	0000
MEAN	0.037	0.500	0.058	6.281	0.449	0.033	0.141	0.280	4.49	0.199	0.103	0.250	0.149	0.660	0.552
S. D.	0.018	0.293	0.018	1.963	0.147	0.013	0.063	0.093	1.02	0.047	0.075	0.107	0.057	0.220	0.173
LOW	0.020	0.215	0.030	1.800	0.250	0.010	0.060	0.130	3.25	0.100	0.060	0.130	0.080	0.130	0.345
HIGH	0.080	1.155	0.100	8.933	0.700	0.060	0.260	0.445	6.63	0.280	0.190	0.340	0.335	0.970	0.940

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- N5 LIVER

LENGTH NUM 1 MEAN 0.430 S. D. 0.000 LOW 0.430 HIGH 0.430
WEIGHT NUM 1 MEAN 0.190 S. D. 0.000 LOW 0.190 HIGH 0.190

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	1.060	0.140	5.450	1.100	0.030	0.060	4.380	43.13	0.190	0.190	0.000	1.120	0.310	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	1.060	0.140	5.450	1.100	0.030	0.060	4.380	43.13	0.190	0.190	0.000	1.120	0.310	0.380

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- 01 MUSCLE

LENGTH NUM 4 MEAN 0.295 S. D. 0.086 LOW 0.228 HIGH 0.412
WEIGHT NUM 4 MEAN 0.274 S. D. 0.254 LOW 0.092 HIGH 0.640

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0001	0003	0000	0000	0000
MEAN	0.052	0.444	0.047	4.461	0.665	0.040	0.178	0.406	4.01	0.254	0.123	0.620	0.323	0.966	0.459
S. D.	0.020	0.105	0.015	1.566	0.488	0.005	0.082	0.146	0.69	0.046	0.118	0.000	0.131	0.111	0.136
LOW	0.040	0.330	0.030	3.020	0.260	0.035	0.095	0.240	3.25	0.200	0.050	0.000	0.200	0.830	0.350
HIGH	0.075	0.535	0.060	6.500	1.360	0.045	0.250	0.595	4.83	0.305	0.260	0.620	0.490	1.095	0.630

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- 02 MUSCLE

LENGTH NUM 10 MEAN 0.350 S. D. 0.043 LOW 0.309 HIGH 0.442
WEIGHT NUM 10 MEAN 0.316 S. D. 0.142 LOW 0.201 HIGH 0.662

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0002	0000	0000	0000	0001	0002	0000	0000	0000	0001	0007	0007	0001	0001	0001
MEAN	0.065	0.350	0.052	5.272	0.495	0.031	0.137	0.290	2.67	0.178	0.188	0.127	0.159	0.565	0.510
S. D.	0.073	0.146	0.018	1.795	0.195	0.019	0.092	0.152	1.14	0.036	0.003	0.065	0.061	0.230	0.172
LOW	0.020	0.060	0.010	3.300	0.270	0.010	0.040	0.040	0.06	0.130	0.185	0.060	0.085	0.060	0.240
HIGH	0.240	0.560	0.075	8.533	0.850	0.065	0.295	0.535	4.62	0.250	0.190	0.190	0.255	0.810	0.750

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- 03 MUSCLE

LENGTH NUM 10 MEAN 0.267 S. D. 0.018 LOW 0.250 HIGH 0.312
WEIGHT NUM 10 MEAN 0.136 S. D. 0.033 LOW 0.104 HIGH 0.217

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000	0006	0007	0000	0000	0000
MEAN	0.046	0.440	0.116	6.885	0.497	0.043	0.130	0.322	3.83	0.220	0.170	0.290	0.197	0.694	0.478
S. D.	0.030	0.194	0.182	1.744	0.181	0.019	0.041	0.131	0.97	0.071	0.129	0.180	0.046	0.271	0.188
LOW	0.020	0.130	0.035	3.750	0.195	0.025	0.070	0.130	1.88	0.090	0.060	0.090	0.090	0.280	0.190
HIGH	0.115	0.750	0.630	9.545	0.720	0.085	0.220	0.530	5.69	0.320	0.310	0.440	0.255	1.285	0.815

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- 04 MUSCLE

LENGTH NUM 1 MEAN 0.370 S. D. 0.000 LOW 0.370 HIGH 0.370
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.130	1.125	0.055	6.150	0.806	0.000	0.590	0.250	3.79	0.215	0.120	0.300	0.175	0.815	0.750
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.130	1.125	0.055	6.150	0.806	0.000	0.590	0.250	3.79	0.215	0.120	0.300	0.175	0.815	0.750

HAKE, SILVER (WHITING) MERLUCCIUS BILINEARIS 033012 AREA- NORTH ATLANTIC SITE- P1 MUSCLE

LENGTH NUM 11 MEAN 0.277 S. D. 0.011 LOW 0.256 HIGH 0.290
WEIGHT NUM 11 MEAN 0.123 S. D. 0.014 LOW 0.106 HIGH 0.144

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0007	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0007	0000	0000	0000
MEAN	0.025	0.436	0.056	6.185	0.534	0.038	0.199	0.298	3.84	0.224	0.175	0.220	0.173	0.669	0.528
S. D.	0.010	0.115	0.022	1.659	0.137	0.013	0.155	0.085	0.66	0.079	0.021	0.159	0.048	0.172	0.158
LOW	0.020	0.310	0.020	3.250	0.350	0.020	0.060	0.110	2.94	0.110	0.160	0.060	0.090	0.380	0.310
HIGH	0.040	0.690	0.110	9.075	0.770	0.060	0.620	0.430	5.05	0.400	0.190	0.440	0.245	0.845	0.750

HAKE, PAC. MERLUCCIUS PRODUCTUS 033013 AREA- CALIFORNIA SITE- F4 MUSCLE

LENGTH NUM 6 MEAN 0.547 S. D. 0.045 LOW 0.490 HIGH 0.590
WEIGHT NUM 6 MEAN 0.780 S. D. 0.163 LOW 0.500 HIGH 1.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0005	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0004	0000	0000	0000
MEAN	0.121	0.632	0.063	1.758	0.491	0.033	0.191	0.373	3.69	0.170	0.340	0.343	0.224	0.690	0.743
S. D.	0.045	0.127	0.020	0.657	0.044	0.009	0.081	0.081	0.50	0.039	0.000	0.046	0.093	0.159	0.158
LOW	0.060	0.440	0.040	0.850	0.403	0.020	0.080	0.245	3.13	0.140	0.000	0.310	0.110	0.440	0.560
HIGH	0.170	0.785	0.090	2.616	0.525	0.045	0.310	0.460	4.37	0.240	0.340	0.375	0.360	0.880	0.905

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                                                      TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   MF17
                                                      IN RESOURCE SURVEY SPECIES;
  LOCATION LEVEL 5                                    BY TISSUE AND LOCATION

  HAKE, PAC.                            MERLUCCIUS PRODUCTUS                 033013   AREA- CALIFORNIA          SITE- F4   LIVER

 LENGTH     NUM    1   MEAN        0.547   S. D.      0.000   LOW      0.547   HIGH          0.547
 WEIGHT     NUM    1   MEAN        0.780   S. D.      0.000   LOW      0.780   HIGH          0.780
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM    PPM      PPM      PPM    PPM      PPM     PPM      PPM

 NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
 N DET.      0001    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0000    0000    0000
 MEAN       0.000   0.750   0.690   3.550   1.250   0.030   0.060   7.500   25.12   0.150   0.280   0.000   1.180   0.130   0.300
 S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 HIGH       0.000   0.750   0.690   3.550   1.250   0.030   0.060   7.500   25.12   0.150   0.280   0.000   1.180   0.130   0.300

  HAKE, PAC.                            MERLUCCIUS PRODUCTUS                 033013   AREA- PACIFIC NORTHWEST   SITE- G9   MUSCLE

 LENGTH     NUM    8   MEAN        0.553   S. D.      0.040   LOW      0.505   HIGH          0.600
 WEIGHT     NUM    0   MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH          0.000
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM    PPM      PPM      PPM    PPM      PPM     PPM      PPM

 NUMBER      0008    0008    0008    0008    0008    0008    0008    0008    0008    0008    0008    0008    0008    0008    0008
 N DET.      0000    0001    0002    0000    0000    0005    0002    0000    0000    0001    0008    0008    0001    0005    0000
 MEAN       0.142   0.471   0.061   3.742   0.485   0.043   0.200   0.289    4.74   0.195   0.000   0.000   0.121   0.660   0.436
 S. D.      0.051   0.165   0.033   1.715   0.138   0.012   0.090   0.073    1.76   0.113   0.000   0.000   0.026   0.160   0.098
 LOW        0.050   0.270   0.030   1.985   0.303   0.030   0.095   0.210    2.86   0.040   0.000   0.000   0.070   0.480   0.300
 HIGH       0.230   0.710   0.110   6.750   0.680   0.050   0.340   0.390    8.03   0.400   0.000   0.000   0.140   0.785   0.600

  HAKE, PAC.                            MERLUCCIUS PRODUCTUS                 033013   AREA- PACIFIC NORTHWEST   SITE- H7   MUSCLE

 LENGTH     NUM    2   MEAN        0.600   S. D.      0.000   LOW      0.600   HIGH          0.600
 WEIGHT     NUM    0   MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH          0.000
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM    PPM      PPM      PPM    PPM      PPM     PPM      PPM

 NUMBER      0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0001
 N DET.      0000    0000    0001    0000    0000    0001    0000    0000    0000    0001    0002    0002    0000    0000    0000
 MEAN       0.140   0.240   0.040   1.641   0.370   0.020   0.138   0.240    3.24   0.230   0.000   0.000   0.130   0.968   0.290
 S. D.      0.028   0.014   0.000   0.536   0.240   0.000   0.053   0.212    1.45   0.000   0.000   0.000   0.014   1.149   0.000
 LOW        0.120   0.230   0.000   1.262   0.200   0.000   0.100   0.090    2.21   0.000   0.000   0.000   0.120   0.155   0.000
 HIGH       0.160   0.250   0.040   2.020   0.540   0.020   0.175   0.390    4.26   0.230   0.000   0.000   0.140   1.780   0.290

  HAKE, PAC.                            MERLUCCIUS PRODUCTUS                 033013   AREA- PACIFIC NORTHWEST   SITE- I7   MUSCLE

 LENGTH     NUM    9   MEAN        0.408   S. D.      0.060   LOW      0.350   HIGH          0.550
 WEIGHT     NUM    8   MEAN        0.357   S. D.      0.045   LOW      0.272   HIGH          0.408
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM    PPM      PPM      PPM    PPM      PPM     PPM      PPM

 NUMBER      0009    0009    0009    0008    0008    0009    0009    0009    0009    0009    0009    0009    0009    0009    0009
 N DET.      0001    0000    0003    0000    0000    0004    0002    0000    0000    0002    0006    0005    0000    0002    0000
 MEAN       0.059   0.418   0.056   1.693   0.421   0.035   0.274   0.234    3.35   0.168   0.417   0.560   0.242   0.693   0.569
 S. D.      0.040   0.173   0.021   0.786   0.472   0.005   0.177   0.060    0.67   0.056   0.432   0.562   0.108   0.226   0.166
 LOW        0.020   0.200   0.030   0.540   0.175   0.030   0.100   0.180    2.50   0.100   0.010   0.120   0.105   0.400   0.350
 HIGH       0.140   0.750   0.075   3.040   1.580   0.040   0.630   0.360    4.64   0.250   0.870   1.380   0.460   0.940   0.870

  HAKE, PAC.                            MERLUCCIUS PRODUCTUS                 033013   AREA- PACIFIC NORTHWEST   SITE- M2   MUSCLE

 LENGTH     NUM   10   MEAN        0.580   S. D.      0.000   LOW      0.580   HIGH          0.580
 WEIGHT     NUM    0   MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH          0.000
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM    PPM      PPM      PPM    PPM      PPM     PPM      PPM

 NUMBER      0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0009    0009    0010    0010    0009
 N DET.      0000    0000    0003    0000    0000    0004    0001    0000    0000    0002    0007    0008    0000    0002    0000
 MEAN       0.090   0.595   0.110   2.473   0.417   0.048   0.174   0.350    4.46   0.422   0.235   0.380   0.353   0.600   0.642
 S. D.      0.030   0.284   0.056   0.857   0.145   0.022   0.125   0.100    2.12   0.170   0.163   0.000   0.172   0.221   0.314
 LOW        0.050   0.255   0.055   0.960   0.160   0.020   0.040   0.250    2.79   0.185   0.120   0.000   0.110   0.245   0.310
 HIGH       0.130   1.165   0.180   3.710   0.650   0.075   0.405   0.535    8.93   0.715   0.350   0.380   0.640   0.950   1.165

  HAKE, PAC.                            MERLUCCIUS PRODUCTUS                 033013   AREA- PACIFIC NORTHWEST   SITE- N1   MUSCLE

 LENGTH     NUM    4   MEAN        0.482   S. D.      0.078   LOW      0.425   HIGH          0.590
 WEIGHT     NUM    1   MEAN        1.134   S. D.      0.000   LOW      1.134   HIGH          1.134
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM    PPM      PPM      PPM    PPM      PPM     PPM      PPM

 NUMBER      0004    0004    0004    0004    0004    0004    0004    0004    0003    0004    0004    0004    0004    0004    0004
 N DET.      0000    0000    0001    0000    0000    0001    0000    0000    0000    0000    0002    0002    0000    0000    0000
 MEAN       0.170   0.626   0.083   2.853   1.076   0.017   0.154   0.215    3.80   0.216   0.125   0.345   0.221   0.678   0.513
 S. D.      0.023   0.361   0.068   2.507   0.976   0.012   0.091   0.041    0.33   0.112   0.163   0.403   0.064   0.274   0.160
 LOW        0.150   0.335   0.030   0.500   0.210   0.010   0.060   0.166    3.60   0.093   0.010   0.060   0.170   0.305   0.295
 HIGH       0.190   1.120   0.160   6.360   2.400   0.030   0.275   0.260    4.18   0.360   0.240   0.630   0.310   0.940   0.665

  HAKE, PAC.                            MERLUCCIUS PRODUCTUS                 033013   AREA- PACIFIC NORTHWEST   SITE- R2   MUSCLE

 LENGTH     NUM   10   MEAN        0.535   S. D.      0.000   LOW      0.535   HIGH          0.535
 WEIGHT     NUM    0   MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH          0.000
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM    PPM      PPM      PPM    PPM      PPM     PPM      PPM

 NUMBER      0010    0010    0010    0009    0009    0010    0010    0010    0010    0010    0010    0009    0010    0010    0010
 N DET.      0000    0000    0001    0000    0000    0006    0000    0000    0000    0000    0010    0009    0000    0004    0000
 MEAN       0.098   0.529   0.086   1.941   0.544   0.045   0.201   0.230    3.85   0.305   0.000   0.000   0.263   0.701   0.648
 S. D.      0.034   0.379   0.034   0.819   0.208   0.021   0.099   0.093    0.90   0.135   0.000   0.000   0.135   0.326   0.268
 LOW        0.060   0.115   0.040   0.830   0.275   0.020   0.070   0.110    2.39   0.090   0.000   0.000   0.110   0.340   0.300
 HIGH       0.155   1.450   0.140   3.025   0.960   0.070   0.380   0.410    5.17   0.500   0.000   0.000   0.510   1.040   1.105
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- I6 MUSCLE

LENGTH NUM 7 MEAN 0.791 S. D. 0.079 LOW 0.700 HIGH 0.900
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0006	0007	0007	0007	0007	0007
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0004	0000	0000	0000
MEAN	0.174	0.466	0.056	6.921	0.525	0.032	0.137	0.332	3.71	0.191	0.125	0.240	0.147	0.700	0.698
S. D.	0.087	0.216	0.015	4.038	0.077	0.010	0.067	0.109	1.37	0.058	0.000	0.180	0.063	0.244	0.212
LOW	0.070	0.310	0.030	1.250	0.400	0.020	0.060	0.120	1.12	0.080	0.000	0.090	0.050	0.430	0.540
HIGH	0.320	0.930	0.080	13.687	0.620	0.050	0.230	0.460	5.12	0.250	0.125	0.440	0.220	1.060	1.095

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- I6 LIVER

LENGTH NUM 7 MEAN 0.791 S. D. 0.079 LOW 0.700 HIGH 0.900
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0006	0005	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0005	0000	0000	0000	0000	0005	0002	0000	0000	0000	0000	0004	0000	0001	0002
MEAN	0.055	0.348	0.301	6.540	0.950	0.010	0.138	3.525	13.63	0.159	0.140	0.113	0.659	0.383	0.308
S. D.	0.021	0.248	0.254	3.383	0.368	0.000	0.083	2.344	4.56	0.066	0.066	0.068	0.137	0.143	0.154
LOW	0.040	0.125	0.070	1.800	0.700	0.010	0.060	0.560	8.00	0.060	0.060	0.060	0.500	0.190	0.100
HIGH	0.070	0.810	0.840	10.550	1.590	0.010	0.250	7.500	20.63	0.230	0.250	0.190	0.890	0.620	0.470

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- I9 MUSCLE

LENGTH NUM 1 MEAN 0.820 S. D. 0.000 LOW 0.820 HIGH 0.820
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.190	0.660	0.065	3.975	0.520	0.040	0.135	0.395	5.01	0.175	0.000	0.060	0.225	0.875	0.720
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.190	0.660	0.065	3.975	0.520	0.040	0.135	0.395	5.01	0.175	0.000	0.060	0.225	0.875	0.720

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- J4 MUSCLE

LENGTH NUM 5 MEAN 0.782 S. D. 0.132 LOW 0.620 HIGH 0.970
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0004	0004	0000	0000	0000
MEAN	0.369	0.425	0.067	3.278	0.499	0.043	0.144	0.405	3.76	0.226	0.130	0.380	0.120	0.539	0.462
S. D.	0.257	0.111	0.022	1.556	0.168	0.026	0.027	0.162	0.52	0.056	0.000	0.000	0.012	0.084	0.153
LOW	0.095	0.310	0.050	1.275	0.300	0.020	0.120	0.250	3.26	0.175	0.000	0.000	0.110	0.440	0.220
HIGH	0.680	0.560	0.105	4.800	0.730	0.080	0.190	0.640	4.44	0.315	0.130	0.380	0.140	0.630	0.630

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- J4 LIVER

LENGTH NUM 3 MEAN 0.863 S. D. 0.092 LOW 0.810 HIGH 0.970
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0002	0000	0000	0000	0000	0000	0001	0000	0000	0000	0001	0003	0000	0000	0000
MEAN	0.070	0.293	0.450	7.629	0.687	0.043	0.060	4.190	13.64	0.117	0.160	0.000	0.397	0.373	0.253
S. D.	0.000	0.156	0.399	4.215	0.371	0.015	0.000	0.190	0.90	0.040	0.042	0.000	0.150	0.164	0.060
LOW	0.000	0.130	0.190	2.850	0.300	0.030	0.060	4.000	12.63	0.070	0.130	0.000	0.240	0.250	0.190
HIGH	0.070	0.440	0.910	10.816	1.040	0.060	0.060	4.380	14.38	0.140	0.190	0.000	0.540	0.560	0.310

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- J5 MUSCLE

LENGTH NUM 20 MEAN 0.435 S. D. 0.163 LOW 0.260 HIGH 0.750
WEIGHT NUM 18 MEAN 1.032 S. D. 0.970 LOW 0.171 HIGH 3.232

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0001	0000	0003	0000	0000	0006	0000	0000	0000	0000	0014	0013	0000	0003	0000
MEAN	0.100	0.599	0.056	3.879	0.546	0.039	0.211	0.538	4.93	0.225	0.175	0.404	0.130	0.702	0.432
S. D.	0.124	0.398	0.023	3.578	0.223	0.019	0.180	0.216	1.39	0.152	0.146	0.240	0.045	0.221	0.159
LOW	0.020	0.190	0.010	1.000	0.280	0.010	0.060	0.130	1.50	0.075	0.060	0.080	0.040	0.250	0.060
HIGH	0.490	1.750	0.120	17.100	1.050	0.090	0.630	0.950	6.78	0.635	0.440	0.780	0.245	1.036	0.705

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- J5 LIVER

LENGTH NUM 15 MEAN 0.652 S. D. 0.089 LOW 0.490 HIGH 0.750
WEIGHT NUM 6 MEAN 1.895 S. D. 0.540 LOW 1.247 HIGH 2.778

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0014	0014	0014	0013	0011	0015	0015	0014	0014	0013	0015	0015	0015	0015	0015
N DET.	0008	0002	0000	0000	0000	0009	0002	0000	0000	0003	0007	0012	0000	0009	0000
MEAN	0.053	0.212	0.188	8.575	1.147	0.023	0.180	5.390	20.23	0.247	0.214	0.333	0.615	0.375	0.316
S. D.	0.050	0.166	0.141	5.916	0.304	0.015	0.192	2.684	12.85	0.134	0.072	0.122	0.448	0.298	0.147
LOW	0.020	0.060	0.060	1.700	0.700	0.010	0.020	2.500	8.81	0.060	0.100	0.200	0.100	0.120	0.130
HIGH	0.150	0.610	0.540	19.000	1.630	0.040	0.750	10.370	56.07	0.470	0.310	0.440	1.960	0.940	0.620

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

POLLOCK   POLLACHIUS VIRENS   033017   AREA- NORTH ATLANTIC   SITE- J7   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.900	0.000	0.900	0.900
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.280	0.250	0.040	1.915	0.550	0.030	0.060	0.260	3.69	0.250	0.000	0.000	0.050	0.440	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.280	0.250	0.040	1.915	0.550	0.030	0.060	0.260	3.69	0.250	0.000	0.000	0.050	0.440	0.630

POLLOCK   POLLACHIUS VIRENS   033017   AREA- NORTH ATLANTIC   SITE- J7   LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.900	0.000	0.900	0.900
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	0.285	0.170	7.431	0.455	0.010	0.660	4.535	9.84	0.140	0.190	0.310	0.475	0.285	0.310
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.285	0.170	7.431	0.455	0.010	0.660	4.535	9.84	0.140	0.190	0.310	0.475	0.285	0.310

POLLOCK   POLLACHIUS VIRENS   033017   AREA- NORTH ATLANTIC   SITE- J8   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	11	0.856	0.088	0.720	0.980
WEIGHT	10	6.179	1.835	3.808	8.796

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0010	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0000	0000	0001	0000	0000	0000	0002	0000	0000	0000	0011	0010	0000	0000	0000
MEAN	0.366	0.450	0.060	2.482	0.447	0.029	0.134	0.473	3.48	0.173	0.000	0.500	0.098	0.668	0.580
S. D.	0.235	0.208	0.013	1.303	0.201	0.013	0.024	0.191	0.96	0.031	0.000	0.000	0.025	0.206	0.145
LOW	0.115	0.250	0.040	0.790	0.190	0.010	0.105	0.190	2.25	0.130	0.000	0.000	0.060	0.310	0.440
HIGH	0.760	0.880	0.090	4.950	0.870	0.055	0.190	0.810	5.12	0.220	0.000	0.500	0.155	1.000	0.870

POLLOCK   POLLACHIUS VIRENS   033017   AREA- NORTH ATLANTIC   SITE- J8   LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.840	0.000	0.840	0.840
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0000	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.060	0.280	6.600	1.030	0.020	0.290	8.750	22.94	0.000	0.090	0.000	0.630	0.440	0.190
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.060	0.280	6.600	1.030	0.020	0.290	8.750	22.94	0.000	0.090	0.000	0.630	0.440	0.190

POLLOCK   POLLACHIUS VIRENS   033017   AREA- NORTH ATLANTIC   SITE- J9   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	10	0.613	0.042	0.560	0.680
WEIGHT	1	1.701	0.000	1.701	1.701

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0006	0008	0000	0000	0000
MEAN	0.143	0.457	0.062	2.717	0.488	0.030	0.170	0.445	4.06	0.246	0.110	0.345	0.118	0.670	0.567
S. D.	0.152	0.162	0.038	0.997	0.232	0.012	0.088	0.159	1.40	0.064	0.063	0.134	0.030	0.243	0.148
LOW	0.040	0.310	0.030	1.115	0.230	0.010	0.090	0.160	2.56	0.160	0.060	0.250	0.060	0.380	0.220
HIGH	0.540	0.810	0.165	4.243	0.930	0.050	0.380	0.735	7.36	0.375	0.190	0.440	0.165	1.035	0.750

POLLOCK   POLLACHIUS VIRENS   033017   AREA- NORTH ATLANTIC   SITE- J9   LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	2	0.610	0.010	0.603	0.617
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0001	0001	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.000	0.500	0.165	6.500	0.680	0.030	0.060	4.375	14.38	0.110	0.240	0.190	0.360	0.375	0.140
S. D.	0.000	0.269	0.064	0.849	0.255	0.000	0.000	0.884	4.42	0.014	0.000	0.000	0.071	0.177	0.113
LOW	0.000	0.310	0.120	5.900	0.500	0.000	0.000	3.750	11.25	0.100	0.000	0.000	0.310	0.250	0.060
HIGH	0.000	0.690	0.210	7.100	0.860	0.030	0.060	5.000	17.50	0.120	0.240	0.190	0.410	0.500	0.220

POLLOCK   POLLACHIUS VIRENS   033017   AREA- NORTH ATLANTIC   SITE- K5   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	12	0.307	0.038	0.258	0.384
WEIGHT	12	0.378	0.142	0.201	0.663

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0011
N DET.	0002	0000	0000	0000	0000	0001	0002	0000	0000	0000	0012	0007	0000	0002	0000
MEAN	0.037	0.338	0.057	4.034	0.573	0.029	0.197	0.594	5.93	0.220	0.000	0.377	0.188	0.695	0.509
S. D.	0.015	0.061	0.009	0.912	0.163	0.011	0.071	0.191	1.07	0.051	0.000	0.261	0.048	0.261	0.113
LOW	0.020	0.250	0.040	2.625	0.220	0.010	0.090	0.200	4.62	0.130	0.000	0.130	0.125	0.370	0.330
HIGH	0.060	0.440	0.073	5.487	0.860	0.040	0.315	0.975	7.62	0.285	0.000	0.815	0.280	1.220	0.685

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- K7 MUSCLE

LENGTH NUM 4 MEAN 0.588 S. D. 0.074 LOW 0.480 HIGH 0.640
WEIGHT NUM 4 MEAN 2.212 S. D. 0.750 LOW 1.134 HIGH 2.722

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0003	0003	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0001	0000	0000	0002	0000	0000	0000	0000	0003	0003	0000	0001	0000
MEAN	0.109	0.299	0.045	3.664	0.463	0.050	0.127	0.393	3.64	0.411	1.120	0.260	0.113	0.967	0.509
S. D.	0.033	0.140	0.009	1.992	0.116	0.028	0.083	0.026	1.15	0.184	0.000	0.000	0.025	0.394	0.197
LOW	0.060	0.145	0.040	1.900	0.340	0.030	0.070	0.375	2.09	0.280	0.000	0.000	0.080	0.630	0.365
HIGH	0.130	0.485	0.055	5.825	0.570	0.070	0.250	0.430	4.81	0.680	1.120	0.260	0.140	1.400	0.800

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- K7 LIVER

LENGTH NUM 2 MEAN 0.552 S. D. 0.101 LOW 0.480 HIGH 0.623
WEIGHT NUM 2 MEAN 1.852 S. D. 1.015 LOW 1.134 HIGH 2.570

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0001	0000	0000	0000	0001	0001	0000	0000	0000	0001	0002	0000	0000	0000
MEAN	0.000	0.125	0.080	5.608	0.723	0.010	0.200	2.073	7.03	0.115	0.180	0.000	0.433	0.418	0.225
S. D.	0.000	0.000	0.042	4.873	0.456	0.000	0.000	1.969	1.99	0.092	0.000	0.000	0.216	0.067	0.035
LOW	0.000	0.000	0.050	2.162	0.400	0.000	0.000	0.680	5.62	0.050	0.000	0.000	0.280	0.370	0.200
HIGH	0.000	0.125	0.110	9.053	1.045	0.010	0.200	3.465	8.43	0.180	0.180	0.000	0.585	0.465	0.250

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- O2 MUSCLE

LENGTH NUM 2 MEAN 0.930 S. D. 0.113 LOW 0.850 HIGH 1.010
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.283	0.280	0.080	4.525	0.415	0.020	0.280	0.468	3.35	0.318	0.000	0.000	0.103	0.795	0.303
S. D.	0.131	0.000	0.071	0.672	0.049	0.000	0.311	0.230	0.76	0.173	0.000	0.000	0.018	0.120	0.159
LOW	0.190	0.000	0.030	4.050	0.380	0.020	0.060	0.305	2.81	0.195	0.000	0.000	0.090	0.710	0.190
HIGH	0.375	0.280	0.130	5.000	0.450	0.020	0.500	0.630	3.88	0.440	0.000	0.000	0.115	0.880	0.415

POLLOCK POLLACHIUS VIRENS 033017 AREA- NORTH ATLANTIC SITE- O2 LIVER

LENGTH NUM 2 MEAN 0.930 S. D. 0.113 LOW 0.850 HIGH 1.010
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.020	0.298	0.155	3.081	1.120	0.020	0.030	4.303	16.45	0.130	0.120	0.310	0.465	0.435	0.233
S. D.	0.000	0.202	0.035	0.892	0.141	0.000	0.000	3.157	6.21	0.042	0.000	0.000	0.021	0.049	0.025
LOW	0.000	0.155	0.130	2.450	1.020	0.000	0.000	2.070	12.06	0.100	0.000	0.000	0.450	0.400	0.215
HIGH	0.020	0.440	0.180	3.712	1.220	0.020	0.030	6.535	20.84	0.160	0.120	0.310	0.480	0.470	0.250

POLLOCK, WALLEYE (ALASKA) THERAGRA CHALCOGRAMMA 033019 AREA- PACIFIC NORTHWEST SITE- I7 MUSCLE

LENGTH NUM 1 MEAN 0.400 S. D. 0.000 LOW 0.400 HIGH 0.400
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0000
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.190	1.030	0.000	3.200	0.330	0.000	0.250	0.360	3.61	0.290	0.000	0.000	0.180	1.250	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.190	1.030	0.000	3.200	0.330	0.000	0.250	0.360	3.61	0.290	0.000	0.000	0.180	1.250	0.000

POLLOCK, WALLEYE (ALASKA) THERAGRA CHALCOGRAMMA 033019 AREA- PACIFIC NORTHWEST SITE- N1 MUSCLE

LENGTH NUM 9 MEAN 0.391 S. D. 0.043 LOW 0.345 HIGH 0.495
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0008	0009	0009	0009	0009	0009
N DET.	0000	0000	0003	0000	0001	0002	0000	0000	0000	0001	0006	0006	0000	0002	0000
MEAN	0.148	0.466	0.063	3.997	0.453	0.056	0.258	0.274	3.41	0.238	0.185	0.397	0.156	0.694	0.547
S. D.	0.045	0.471	0.027	1.485	0.331	0.016	0.265	0.074	0.91	0.080	0.048	0.075	0.058	0.296	0.245
LOW	0.085	0.150	0.040	1.600	0.080	0.035	0.050	0.140	1.88	0.110	0.130	0.310	0.060	0.340	0.300
HIGH	0.210	1.690	0.110	5.926	1.180	0.080	0.840	0.390	5.00	0.360	0.220	0.440	0.250	1.250	1.060

POLLOCK, WALLEYE (ALASKA) THERAGRA CHALCOGRAMMA 033019 AREA- ALASKA SITE- L7 MUSCLE

LENGTH NUM 5 MEAN 0.475 S. D. 0.000 LOW 0.475 HIGH 0.475
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0005	0004	0000	0000	0000
MEAN	0.116	0.411	0.077	3.175	0.220	0.039	0.098	0.290	3.67	0.244	0.000	0.190	0.092	0.866	0.521
S. D.	0.095	0.187	0.020	1.770	0.069	0.002	0.044	0.071	0.32	0.107	0.000	0.000	0.022	0.300	0.198
LOW	0.040	0.240	0.060	0.925	0.130	0.035	0.040	0.190	3.31	0.080	0.000	0.000	0.060	0.630	0.220
HIGH	0.220	0.720	0.105	4.625	0.310	0.040	0.130	0.380	4.16	0.340	0.000	0.190	0.110	1.250	0.740

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES: BY TISSUE AND LOCATION

LOCATION LEVEL 5

POLLOCK, WALLEYE (ALAS<A) THERAGRA CHALCOGRAMMA 033019 AREA- ALASKA SITE- N6 MUSCLE

LENGTH NUM 28 MEAN 0.498 S. D. 0.068 LOW 0.408 HIGH 0.665
WEIGHT NUM 8 MEAN 0.936 S. D. 0.132 LOW 0.681 HIGH 1.135

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0028	0028	0028	0028	0028	0028	0028	0028	0028	0028	0028	0028	0028	0028	0028
N DET.	0012	0000	0000	0000	0000	0002	0005	0000	0000	0000	0024	0022	0001	0000	0000
MEAN	0.135	0.595	0.077	2.603	0.374	0.029	0.232	0.520	4.58	0.177	0.228	0.317	0.144	0.644	0.787
S. D.	0.225	0.463	0.060	1.174	0.187	0.011	0.195	0.427	1.02	0.069	0.057	0.346	0.049	0.240	0.325
LOW	0.020	0.130	0.010	0.750	0.120	0.010	0.060	0.130	2.00	0.060	0.190	0.060	0.060	0.050	0.220
HIGH	0.950	2.060	0.290	5.375	0.915	0.060	0.810	2.380	6.31	0.310	0.310	1.000	0.250	1.060	1.630

POLLOCK, WALLEYE (ALASKA) THERAGRA CHALCOGRAMMA 033019 AREA- ALASKA SITE- N6 LIVER

LENGTH NUM 3 MEAN 0.488 S. D. 0.024 LOW 0.461 HIGH 0.507
WEIGHT NUM 1 MEAN 0.936 S. D. 0.000 LOW 0.936 HIGH 0.936

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0000	0000	0000
MEAN	0.050	0.417	0.353	5.937	0.803	0.042	0.153	2.670	15.16	0.120	0.240	0.000	0.888	0.562	0.503
S. D.	0.000	0.235	0.183	6.867	0.251	0.028	0.067	1.128	5.11	0.013	0.068	0.000	0.254	0.128	0.110
LOW	0.000	0.250	0.210	1.550	0.520	0.010	0.105	1.370	11.25	0.110	0.175	0.000	0.650	0.435	0.440
HIGH	0.050	0.685	0.560	13.850	1.000	0.060	0.230	3.390	20.94	0.135	0.310	0.000	1.155	0.690	0.630

POLLOCK, WALLEYE (ALASKA) THERAGRA CHALCOGRAMMA 033019 AREA- ALASKA SITE- R1 MUSCLE

LENGTH NUM 5 MEAN 0.440 S. D. 0.000 LOW 0.440 HIGH 0.440
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0004	0005	0004
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0004	0000	0000	0000
MEAN	0.363	0.488	0.083	1.397	0.343	0.054	0.202	0.347	5.98	0.247	0.140	0.440	0.151	0.695	0.829
S. D.	0.097	0.183	0.010	0.505	0.136	0.020	0.078	0.097	2.02	0.118	0.028	0.000	0.019	0.128	0.284
LOW	0.220	0.375	0.070	0.616	0.170	0.035	0.130	0.200	4.12	0.115	0.120	0.000	0.140	0.560	0.495
HIGH	0.440	0.810	0.090	2.000	0.530	0.080	0.310	0.470	9.10	0.380	0.160	0.440	0.180	0.870	1.190

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- I3 MUSCLE

LENGTH NUM 7 MEAN 0.395 S. D. 0.090 LOW 0.258 HIGH 0.508
WEIGHT NUM 7 MEAN 0.565 S. D. 0.385 LOW 0.108 HIGH 1.121

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0006	0006	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0003	0000	0000	0000	0000	0001	0001	0000	0000	0000	0006	0007	0000	0000	0000
MEAN	0.093	0.376	0.038	10.196	0.550	0.033	0.089	0.205	2.88	0.204	0.190	0.000	0.154	0.607	0.457
S. D.	0.054	0.115	0.024	5.135	0.280	0.010	0.034	0.052	0.43	0.064	0.000	0.000	0.051	0.238	0.111
LOW	0.045	0.190	0.010	2.875	0.180	0.020	0.060	0.130	2.38	0.155	0.000	0.000	0.090	0.250	0.340
HIGH	0.170	0.530	0.065	17.500	0.920	0.050	0.130	0.260	3.69	0.340	0.190	0.000	0.230	0.910	0.630

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- I5 MUSCLE

LENGTH NUM 4 MEAN 0.408 S. D. 0.017 LOW 0.394 HIGH 0.431
WEIGHT NUM 4 MEAN 0.519 S. D. 0.101 LOW 0.411 HIGH 0.633

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.063	0.442	0.060	11.166	0.513	0.038	0.112	0.311	3.71	0.184	0.197	0.117	0.140	0.940	0.474
S. D.	0.018	0.339	0.011	5.251	0.359	0.010	0.078	0.081	1.24	0.058	0.142	0.074	0.014	0.227	0.310
LOW	0.040	0.250	0.050	7.575	0.260	0.030	0.020	0.240	2.30	0.120	0.070	0.060	0.130	0.750	0.215
HIGH	0.085	0.950	0.075	18.750	1.043	0.050	0.210	0.420	4.95	0.260	0.350	0.200	0.160	1.200	0.890

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- I7 MUSCLE

LENGTH NUM 11 MEAN 0.377 S. D. 0.011 LOW 0.357 HIGH 0.393
WEIGHT NUM 11 MEAN 0.510 S. D. 0.074 LOW 0.409 HIGH 0.645

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0000	0000	0000	0000	0000	0000	0003	0000	0000	0000	0010	0007	0000	0000	0000
MEAN	0.062	0.396	0.056	7.553	0.375	0.045	0.156	0.401	2.75	0.213	0.060	0.435	0.162	0.567	0.519
S. D.	0.029	0.218	0.014	2.497	0.135	0.041	0.065	0.338	0.68	0.109	0.000	0.288	0.040	0.249	0.208
LOW	0.030	0.130	0.040	4.450	0.185	0.010	0.060	0.060	1.65	0.080	0.000	0.060	0.075	0.280	0.220
HIGH	0.110	0.845	0.080	12.765	0.610	0.150	0.250	1.380	3.87	0.500	0.060	0.690	0.230	1.130	0.810

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- J1 MUSCLE

LENGTH NUM 3 MEAN 0.461 S. D. 0.080 LOW 0.394 HIGH 0.550
WEIGHT NUM 3 MEAN 0.768 S. D. 0.448 LOW 0.430 HIGH 1.276

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0000	0000
MEAN	0.110	0.373	0.052	23.649	0.458	0.028	0.282	0.242	2.42	0.238	0.000	0.310	0.120	0.487	0.448
S. D.	0.061	0.105	0.019	10.668	0.302	0.013	0.242	0.067	0.31	0.109	0.000	0.000	0.028	0.081	0.013
LOW	0.040	0.310	0.030	12.716	0.250	0.015	0.125	0.165	2.15	0.150	0.000	0.000	0.095	0.440	0.435
HIGH	0.150	0.495	0.065	34.030	0.805	0.040	0.560	0.290	2.75	0.360	0.000	0.310	0.150	0.580	0.460

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- J4 MUSCLE

LENGTH NUM 5 MEAN 0.388 S. D. 0.093 LOW 0.310 HIGH 0.510
WEIGHT NUM 5 MEAN 0.563 S. D. 0.457 LOW 0.199 HIGH 1.192

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0001	0000	0000	0000	0000	0000	0000	0001	0000	0000	0005	0005	0000	0000	0000
MEAN	0.103	0.472	0.048	13.395	0.451	0.024	0.256	0.185	2.93	0.189	0.000	0.000	0.137	0.535	0.510
S. D.	0.097	0.177	0.010	8.198	0.046	0.011	0.200	0.061	0.41	0.043	0.000	0.000	0.038	0.110	0.164
LOW	0.025	0.375	0.040	2.700	0.390	0.010	0.060	0.125	2.47	0.130	0.000	0.000	0.080	0.390	0.340
HIGH	0.230	0.785	0.065	24.366	0.500	0.040	0.560	0.270	3.50	0.250	0.000	0.000	0.180	0.695	0.750

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- K2 MUSCLE

LENGTH NUM 1 MEAN 0.310 S. D. 0.000 LOW 0.310 HIGH 0.310
WEIGHT NUM 1 MEAN 0.234 S. D. 0.000 LOW 0.234 HIGH 0.234

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.020	0.130	0.060	3.950	0.650	0.010	0.000	0.230	3.00	0.100	0.000	0.000	0.120	0.280	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.130	0.060	3.950	0.650	0.010	0.000	0.230	3.00	0.100	0.000	0.000	0.120	0.280	0.380

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- N4 MUSCLE

LENGTH NUM 4 MEAN 0.367 S. D. 0.078 LOW 0.266 HIGH 0.453
WEIGHT NUM 4 MEAN 0.483 S. D. 0.310 LOW 0.127 HIGH 0.881

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0003	0004	0000	0000	0000
MEAN	0.136	0.486	0.055	8.336	0.515	0.022	0.143	0.166	3.99	0.125	0.130	0.000	0.200	0.539	0.440
S. D.	0.044	0.133	0.013	2.022	0.075	0.008	0.068	0.050	0.95	0.070	0.000	0.000	0.045	0.177	0.000
LOW	0.100	0.393	0.035	6.270	0.420	0.015	0.060	0.095	3.30	0.050	0.000	0.000	0.150	0.310	0.440
HIGH	0.190	0.680	0.063	11.050	0.600	0.030	0.225	0.210	5.39	0.203	0.130	0.000	0.260	0.716	0.440

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- N6 MUSCLE

LENGTH NUM 4 MEAN 0.289 S. D. 0.045 LOW 0.237 HIGH 0.340
WEIGHT NUM 4 MEAN 0.150 S. D. 0.073 LOW 0.078 HIGH 0.245

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0000	0000
MEAN	0.087	0.534	0.078	8.528	0.495	0.049	0.323	0.354	3.43	0.241	0.143	0.375	0.254	0.856	0.616
S. D.	0.060	0.152	0.013	2.305	0.117	0.012	0.164	0.045	0.29	0.034	0.144	0.092	0.042	0.302	0.300
LOW	0.030	0.310	0.060	6.297	0.340	0.040	0.175	0.300	3.19	0.205	0.060	0.310	0.200	0.500	0.270
HIGH	0.150	0.630	0.090	11.575	0.620	0.065	0.510	0.405	3.84	0.270	0.310	0.440	0.290	1.190	1.000

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- O1 MUSCLE

LENGTH NUM 6 MEAN 0.274 S. D. 0.058 LOW 0.189 HIGH 0.353
WEIGHT NUM 6 MEAN 0.162 S. D. 0.091 LOW 0.052 HIGH 0.305

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0005	0006	0006	0006	0006	0006	0006	0006
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0002	0000	0000	0000
MEAN	0.055	0.360	0.079	7.452	0.621	0.039	0.393	0.488	4.54	0.299	0.250	0.323	0.166	0.712	0.698
S. D.	0.028	0.255	0.019	3.739	0.477	0.013	0.300	0.227	1.03	0.104	0.000	0.109	0.078	0.259	0.309
LOW	0.020	0.250	0.060	2.900	0.310	0.030	0.060	0.270	3.40	0.200	0.000	0.250	0.100	0.380	0.470
HIGH	0.090	0.880	0.110	14.000	1.560	0.060	0.880	0.810	6.38	0.460	0.250	0.480	0.310	0.970	1.310

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- O3 MUSCLE

LENGTH NUM 6 MEAN 0.375 S. D. 0.105 LOW 0.298 HIGH 0.510
WEIGHT NUM 6 MEAN 0.475 S. D. 0.403 LOW 0.159 HIGH 1.021

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0006	0000	0000	0000
MEAN	0.068	0.366	0.053	8.238	0.488	0.038	0.100	0.279	3.42	0.197	0.110	0.000	0.187	0.657	0.601
S. D.	0.052	0.172	0.012	2.792	0.172	0.012	0.030	0.083	0.77	0.053	0.071	0.000	0.136	0.106	0.177
LOW	0.020	0.220	0.035	4.600	0.275	0.025	0.060	0.180	2.56	0.110	0.060	0.000	0.090	0.500	0.345
HIGH	0.160	0.690	0.070	11.405	0.730	0.060	0.130	0.405	4.37	0.255	0.160	0.000	0.455	0.750	0.875

HAKE, RED UROPHYCIS CHUSS 033020 AREA- NORTH ATLANTIC SITE- P1 MUSCLE

LENGTH NUM 2 MEAN 0.347 S. D. 0.025 LOW 0.329 HIGH 0.365
WEIGHT NUM 2 MEAN 0.327 S. D. 0.093 LOW 0.261 HIGH 0.392

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.102	0.595	0.063	11.130	0.540	0.033	0.128	0.345	4.28	0.200	0.220	0.155	0.213	0.728	0.545
S. D.	0.012	0.085	0.011	1.230	0.156	0.011	0.004	0.141	0.31	0.021	0.042	0.000	0.074	0.117	0.156
LOW	0.093	0.535	0.055	10.260	0.430	0.025	0.125	0.245	4.06	0.185	0.190	0.000	0.160	0.645	0.435
HIGH	0.110	0.655	0.070	12.000	0.650	0.040	0.130	0.445	4.50	0.215	0.250	0.155	0.265	0.810	0.655

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

HAKE, RED   UROPHYCIS CHUSS   033020   AREA- NORTH ATLANTIC   SITE- P2   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	12	0.372	0.026	0.343	0.426
WEIGHT	12	0.408	0.090	0.314	0.580

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0010	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0010	0010	0000	0001	0000
MEAN	0.110	0.468	0.050	13.926	0.346	0.035	0.237	0.243	3.10	0.193	0.175	0.200	0.162	0.637	0.587
S. D.	0.040	0.212	0.010	10.578	0.195	0.010	0.287	0.106	0.98	0.050	0.021	0.156	0.045	0.174	0.246
LOW	0.050	0.250	0.035	0.400	0.065	0.020	0.060	0.050	0.63	0.110	0.160	0.090	0.110	0.380	0.185
HIGH	0.150	1.000	0.065	42.500	0.765	0.060	1.065	0.370	4.25	0.300	0.190	0.310	0.280	0.940	1.120

HAKE, SPOTTED   UROPHYCIS REGIUS   033024   AREA- NORTH ATLANTIC   SITE- N6   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	5	0.197	0.017	0.175	0.216
WEIGHT	5	0.087	0.026	0.058	0.115

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0005	0000	0003	0000
MEAN	0.066	0.332	0.091	4.316	0.372	0.037	0.192	0.437	3.25	0.278	0.000	0.000	0.174	0.755	0.693
S. D.	0.036	0.160	0.026	2.388	0.200	0.007	0.076	0.193	0.77	0.092	0.300	0.000	0.032	0.177	0.384
LOW	0.020	0.130	0.060	1.290	0.080	0.030	0.120	0.270	1.88	0.180	0.000	0.000	0.140	0.630	0.280
HIGH	0.110	0.560	0.120	6.765	0.605	0.045	0.310	0.750	3.69	0.375	0.000	0.000	0.210	0.880	1.310

HAKE, SPOTTED   UROPHYCIS REGIUS   033024   AREA- NORTH ATLANTIC   SITE- N8   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	7	0.189	0.019	0.167	0.225
WEIGHT	7	0.068	0.020	0.044	0.106

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0006	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0007	0000	0005	0000
MEAN	0.070	0.492	0.103	5.008	0.386	0.046	0.223	0.454	4.58	0.233	0.090	0.000	0.243	0.970	0.609
S. D.	0.044	0.175	0.078	4.056	0.116	0.010	0.110	0.156	1.71	0.067	0.000	0.000	0.132	0.127	0.201
LOW	0.020	0.250	0.070	1.010	0.230	0.030	0.060	0.260	2.90	0.130	0.000	0.000	0.070	0.880	0.380
HIGH	0.130	0.720	0.280	12.500	0.540	0.060	0.380	0.710	7.31	0.310	0.090	0.000	0.460	1.060	1.000

HAKE, SPOTTED   UROPHYCIS REGIUS   033024   AREA- NORTH ATLANTIC   SITE- S1   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	19	0.201	0.029	0.172	0.305
WEIGHT	19	0.083	0.059	0.044	0.313

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0019	0019	0019	0019	0019	0019	0019	0019	0019	0018	0019	0019	0019	0019	0018
N DET.	0008	0000	0000	0000	0000	0001	0001	0000	0000	0001	0018	0019	0000	0005	0000
MEAN	0.087	0.360	0.066	4.662	0.362	0.041	0.293	0.370	3.56	0.244	0.060	0.000	0.325	0.646	0.613
S. D.	0.041	0.207	0.022	2.100	0.145	0.013	0.265	0.116	0.60	0.108	0.000	0.000	0.128	0.253	0.180
LOW	0.040	0.060	0.030	1.040	0.060	0.010	0.060	0.140	2.19	0.080	0.000	0.000	0.150	0.250	0.380
HIGH	0.160	0.880	0.120	10.100	0.620	0.060	1.000	0.630	4.44	0.510	0.060	0.000	0.570	1.100	1.000

HAKE, SPOTTED   UROPHYCIS REGIUS   033024   AREA- NORTH ATLANTIC   SITE- S4   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	34	0.186	0.019	0.161	0.232
WEIGHT	34	0.065	0.027	0.036	0.133

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0033	0034	0034	0034	0034	0034	0034	0033	0034	0034	0034	0034	0034	0034	0033
N DET.	0010	0000	0000	0000	0000	0000	0002	0000	0000	0000	0033	0032	0000	0030	0000
MEAN	0.060	0.407	0.073	4.818	0.382	0.041	0.204	0.320	4.12	0.245	0.180	0.160	0.275	0.698	0.509
S. D.	0.060	0.219	0.027	2.140	0.152	0.017	0.095	0.177	0.76	0.080	0.000	0.042	0.084	0.163	0.091
LOW	0.020	0.190	0.050	0.920	0.050	0.010	0.060	0.090	3.12	0.090	0.000	0.130	0.120	0.500	0.380
HIGH	0.300	1.370	0.210	9.100	0.650	0.100	0.440	1.030	6.88	0.460	0.180	0.190	0.495	0.850	0.690

HAKE, WHITE   UROPHYCIS TENUIS   033025   AREA- NORTH ATLANTIC   SITE- E8   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	8	0.584	0.253	0.334	0.990
WEIGHT	5	0.541	0.293	0.255	0.869

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000	0007	0005	0000	0001	0000
MEAN	0.145	0.389	0.062	6.133	0.534	0.033	0.121	0.228	2.93	0.178	0.500	0.420	0.124	0.431	0.411
S. D.	0.133	0.140	0.021	1.803	0.151	0.016	0.057	0.056	0.29	0.045	0.000	0.092	0.031	0.232	0.109
LOW	0.020	0.190	0.043	3.950	0.300	0.010	0.055	0.170	2.54	0.120	0.000	0.320	0.090	0.060	0.215
HIGH	0.330	0.565	0.110	8.795	0.730	0.060	0.203	0.310	3.40	0.230	0.500	0.500	0.175	0.713	0.560

HAKE, WHITE   UROPHYCIS TENUIS   033025   AREA- NORTH ATLANTIC   SITE- E8   LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	2	0.960	0.042	0.930	0.990
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.148	0.220	0.220	15.314	1.615	0.053	0.190	13.678	99.61	0.165	0.330	0.235	1.123	0.210	0.283
S. D.	0.088	0.042	0.085	10.250	0.163	0.039	0.000	13.368	8.29	0.092	0.071	0.000	0.110	0.212	0.046
LOW	0.085	0.190	0.160	8.066	1.500	0.025	0.000	4.225	93.75	0.100	0.280	0.000	1.045	0.060	0.250
HIGH	0.210	0.250	0.280	22.562	1.730	0.080	0.190	23.130	105.47	0.230	0.380	0.235	1.200	0.360	0.315

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- I5 MUSCLE

LENGTH NUM 1 MEAN 0.490 S. D. 0.000 LOW 0.490 HIGH 0.490
WEIGHT NUM 1 MEAN 0.907 S. D. 0.000 LOW 0.907 HIGH 0.907

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.060	0.300	0.030	6.500	0.360	0.000	0.100	0.160	3.16	0.255	0.280	0.000	0.115	0.620	0.620
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.060	0.300	0.030	6.500	0.360	0.000	0.100	0.160	3.16	0.255	0.280	0.000	0.115	0.620	0.620

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- I6 MUSCLE

LENGTH NUM 1 MEAN 0.290 S. D. 0.000 LOW 0.290 HIGH 0.290
WEIGHT NUM 1 MEAN 0.432 S. D. 0.000 LOW 0.432 HIGH 0.432

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0001	0002	0000	0000	0000
MEAN	0.220	0.280	0.040	5.438	0.450	0.030	0.190	0.255	3.06	0.265	0.060	0.000	0.160	0.780	0.500
S. D.	0.156	0.042	0.000	4.366	0.566	0.000	0.000	0.092	0.71	0.035	0.000	0.000	0.085	0.042	0.085
LOW	0.110	0.250	0.040	2.350	0.050	0.030	0.000	0.190	2.56	0.240	0.000	0.000	0.100	0.750	0.440
HIGH	0.330	0.310	0.040	8.525	0.850	0.030	0.190	0.320	3.56	0.290	0.060	0.000	0.220	0.810	0.560

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- I6 LIVER

LENGTH NUM 1 MEAN 0.620 S. D. 0.000 LOW 0.620 HIGH 0.620
WEIGHT NUM 1 MEAN 1.311 S. D. 0.000 LOW 1.311 HIGH 1.311

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0000	0001	0001	0001	0000	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0001
MEAN	0.000	0.380	0.160	1.750	0.000	0.020	0.060	4.070	0.00	0.070	0.000	0.000	0.710	0.250	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.380	0.160	1.750	0.000	0.020	0.060	4.070	0.00	0.070	0.000	0.000	0.710	0.250	0.000

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- J1 MUSCLE

LENGTH NUM 13 MEAN 0.570 S. D. 0.203 LOW 0.288 HIGH 0.920
WEIGHT NUM 8 MEAN 0.684 S. D. 0.346 LOW 0.171 HIGH 1.361

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0012	0012	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013
N DET.	0003	0000	0000	0000	0000	0003	0001	0000	0000	0000	0008	0009	0000	0000	0000
MEAN	0.066	0.370	0.060	7.295	0.636	0.032	0.141	0.232	2.65	0.183	0.162	0.263	0.110	0.561	0.425
S. D.	0.052	0.144	0.040	3.770	0.393	0.011	0.102	0.069	0.44	0.048	0.098	0.055	0.031	0.220	0.179
LOW	0.020	0.190	0.030	2.240	0.350	0.010	0.040	0.125	2.06	0.100	0.060	0.190	0.050	0.190	0.175
HIGH	0.155	0.620	0.180	14.430	1.705	0.045	0.345	0.360	3.84	0.250	0.280	0.310	0.170	1.060	0.870

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- J1 LIVER

LENGTH NUM 4 MEAN 0.755 S. D. 0.227 LOW 0.421 HIGH 0.920
WEIGHT NUM 1 MEAN 0.584 S. D. 0.000 LOW 0.584 HIGH 0.584

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0004	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0003	0000	0001	0000
MEAN	0.000	0.245	0.065	17.239	0.933	0.030	0.284	7.988	46.66	0.306	0.133	0.130	0.731	0.177	0.293
S. D.	0.000	0.110	0.006	6.797	0.261	0.010	0.139	4.497	17.18	0.320	0.055	0.000	0.242	0.102	0.102
LOW	0.000	0.120	0.060	9.700	0.603	0.020	0.080	3.860	28.21	0.085	0.080	0.000	0.500	0.060	0.220
HIGH	0.000	0.375	0.070	25.862	1.180	0.040	0.375	14.370	67.50	0.780	0.190	0.130	1.060	0.250	0.440

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- J4 MUSCLE

LENGTH NUM 11 MEAN 0.691 S. D. 0.073 LOW 0.600 HIGH 0.860
WEIGHT NUM 1 MEAN 3.175 S. D. 0.000 LOW 3.175 HIGH 3.175

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0004	0000	0000	0000	0000	0001	0000	0000	0000	0000	0010	0009	0000	0007	0000
MEAN	0.080	0.308	0.050	9.424	0.405	0.029	0.207	0.228	2.71	0.233	0.060	0.125	0.110	0.576	0.583
S. D.	0.073	0.164	0.016	7.333	0.194	0.003	0.135	0.049	0.32	0.073	0.000	0.092	0.014	0.283	0.160
LOW	0.025	0.060	0.010	2.550	0.080	0.020	0.030	0.160	2.31	0.095	0.000	0.060	0.090	0.425	0.370
HIGH	0.240	0.690	0.070	25.500	0.730	0.030	0.440	0.310	3.44	0.360	0.060	0.190	0.140	1.000	0.940

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- J4 LIVER

LENGTH NUM 6 MEAN 0.725 S. D. 0.072 LOW 0.650 HIGH 0.860
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0003	0006	0006	0006	0005	0006	0006	0006	0006	0006	0006
N DET.	0006	0000	0000	0000	0000	0001	0004	0000	0000	0000	0004	0006	0000	0001	0004
MEAN	0.000	0.153	0.063	9.485	0.470	0.084	0.060	6.392	34.05	0.220	0.110	0.000	0.622	0.284	0.125
S. D.	0.000	0.103	0.041	6.456	0.408	0.138	0.000	3.830	19.28	0.274	0.071	0.000	0.217	0.143	0.092
LOW	0.000	0.060	0.020	4.300	0.210	0.010	0.060	3.500	8.90	0.010	0.060	0.000	0.330	0.160	0.060
HIGH	0.000	0.310	0.140	20.250	0.940	0.330	0.060	13.800	61.00	0.760	0.160	0.000	0.920	0.440	0.190

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- J5 MUSCLE

LENGTH NUM 17 MEAN 0.582 S. D. 0.132 LOW 0.377 HIGH 0.780
WEIGHT NUM 14 MEAN 1.712 S. D. 1.267 LOW 0.529 HIGH 4.540

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0017	0017	0017	0017	0017	0017	0016	0017	0017	0017	0017	0017	0017	0017	0017
N DET.	0003	0000	0001	0000	0000	0000	0000	0000	0000	0000	0009	0012	0000	0000	0000
MEAN	0.120	0.374	0.073	7.556	0.466	0.027	0.215	0.231	2.95	0.314	0.186	0.200	0.145	0.576	0.569
S. D.	0.069	0.159	0.048	4.275	0.149	0.014	0.220	0.116	0.86	0.218	0.093	0.193	0.046	0.199	0.236
LOW	0.020	0.190	0.030	1.100	0.270	0.010	0.060	0.060	1.78	0.153	0.060	0.060	0.090	0.190	0.220
HIGH	0.265	0.720	0.220	20.400	0.765	0.060	0.940	0.500	4.56	1.000	0.370	0.440	0.240	1.095	1.190

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- J5 LIVER

LENGTH NUM 8 MEAN 0.683 S. D. 0.039 LOW 0.620 HIGH 0.750
WEIGHT NUM 5 MEAN 2.631 S. D. 0.608 LOW 1.814 HIGH 3.175

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0007	0006	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0007	0001	0002	0000	0000	0004	0003	0000	0000	0000	0004	0006	0000	0003	0000
MEAN	0.103	0.188	0.061	7.604	0.576	0.033	0.471	5.261	37.54	0.161	0.158	0.250	0.628	0.314	0.331
S. D.	0.000	0.103	0.019	4.719	0.200	0.022	0.745	2.531	9.42	0.139	0.065	0.000	0.111	0.009	0.182
LOW	0.000	0.060	0.040	1.800	0.350	0.010	0.060	1.820	18.06	0.050	0.060	0.250	0.510	0.310	0.120
HIGH	0.103	0.345	0.085	12.650	0.915	0.060	1.800	9.060	50.63	0.480	0.190	0.250	0.840	0.330	0.630

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- J6 MUSCLE

LENGTH NUM 2 MEAN 0.710 S. D. 0.042 LOW 0.680 HIGH 0.740
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.248	0.580	0.085	4.063	0.748	0.038	0.090	0.283	4.22	0.333	0.120	0.060	0.130	0.628	0.273
S. D.	0.216	0.156	0.021	2.210	0.520	0.039	0.000	0.060	1.90	0.152	0.057	0.000	0.057	0.004	0.117
LOW	0.095	0.470	0.070	2.500	0.380	0.010	0.000	0.240	2.88	0.225	0.080	0.000	0.090	0.625	0.190
HIGH	0.400	0.690	0.100	5.625	1.116	0.065	0.090	0.325	5.56	0.440	0.160	0.060	0.170	0.630	0.355

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- J6 LIVER

LENGTH NUM 2 MEAN 0.710 S. D. 0.042 LOW 0.680 HIGH 0.740
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000	0000	0000
MEAN	0.090	0.263	0.075	4.675	0.685	0.020	0.085	5.103	47.72	0.103	0.140	0.000	0.738	0.438	0.180
S. D.	0.000	0.286	0.021	0.000	0.134	0.000	0.007	1.022	1.19	0.018	0.071	0.000	0.301	0.004	0.014
LOW	0.000	0.060	0.060	0.000	0.590	0.020	0.080	4.380	46.88	0.090	0.090	0.000	0.525	0.435	0.170
HIGH	0.090	0.465	0.090	4.675	0.780	0.020	0.090	5.825	48.56	0.115	0.190	0.000	0.950	0.440	0.190

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- J7 MUSCLE

LENGTH NUM 2 MEAN 0.748 S. D. 0.018 LOW 0.735 HIGH 0.760
WEIGHT NUM 2 MEAN 4.650 S. D. 0.320 LOW 4.423 HIGH 4.876

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.135	0.455	0.083	4.637	0.575	0.033	0.110	0.185	2.86	0.175	0.160	0.205	0.155	0.470	0.375
S. D.	0.014	0.064	0.046	1.631	0.000	0.004	0.014	0.028	0.20	0.049	0.000	0.106	0.021	0.085	0.134
LOW	0.125	0.410	0.050	3.483	0.000	0.030	0.100	0.165	2.72	0.140	0.000	0.130	0.140	0.410	0.280
HIGH	0.145	0.500	0.115	5.790	0.575	0.035	0.120	0.205	3.00	0.210	0.160	0.280	0.170	0.530	0.470

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- K2 MUSCLE

LENGTH NUM 1 MEAN 0.940 S. D. 0.000 LOW 0.940 HIGH 0.940
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.103	0.293	0.040	10.140	0.650	0.033	0.185	0.190	3.31	0.236	0.285	0.310	0.166	0.376	0.460
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.103	0.293	0.040	10.140	0.650	0.033	0.185	0.190	3.31	0.236	0.285	0.310	0.166	0.376	0.460

HAKE, WHITE UROPHYCIS TENUIS 033025 AREA- NORTH ATLANTIC SITE- K2 LIVER

LENGTH NUM 1 MEAN 0.940 S. D. 0.000 LOW 0.940 HIGH 0.940
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	0.190	0.030	10.930	0.780	0.000	0.310	1.940	36.88	0.090	0.190	0.310	0.540	0.310	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.190	0.030	10.930	0.780	0.000	0.310	1.940	36.88	0.090	0.190	0.310	0.540	0.310	0.380

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

HAKE, WHITE   UROPHYCIS TENUIS   033025   AREA- NORTH ATLANTIC   SITE- K5   MUSCLE

LENGTH NUM 8 MEAN 0.674 S. D. 0.097 LOW 0.520 HIGH 0.850
WEIGHT NUM 8 MEAN 1.889 S. D. 0.532 LOW 1.419 HIGH 2.944

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000	0007	0007	0000	0000	0000
MEAN	0.173	0.363	0.056	9.031	0.526	0.027	0.101	0.234	3.70	0.199	0.120	0.310	0.111	0.515	0.414
S. D.	0.127	0.128	0.013	3.871	0.192	0.015	0.050	0.060	2.16	0.068	0.000	0.000	0.027	0.154	0.099
LOW	0.090	0.120	0.040	3.533	0.250	0.010	0.060	0.120	2.69	0.100	0.000	0.000	0.080	0.370	0.220
HIGH	0.470	0.565	0.075	15.712	0.890	0.050	0.190	0.310	9.03	0.330	0.120	0.310	0.170	0.750	0.540

HAKE, WHITE   UROPHYCIS TENUIS   033025   AREA- NORTH ATLANTIC   SITE- K5   LIVER

LENGTH NUM 7 MEAN 0.680 S. D. 0.103 LOW 0.520 HIGH 0.850
WEIGHT NUM 7 MEAN 1.951 S. D. 0.542 LOW 1.419 HIGH 2.944

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0006	0006	0007	0007	0006	0007	0006	0007	0007	0007	0007	0007
N DET.	0004	0000	0000	0000	0000	0003	0002	0000	0000	0000	0004	0005	0000	0001	0000
MEAN	0.057	0.297	0.133	19.706	0.542	0.068	0.236	4.793	48.86	0.158	0.123	0.155	0.670	0.280	0.214
S. D.	0.035	0.194	0.103	13.446	0.229	0.108	0.209	0.690	18.33	0.058	0.006	0.134	0.241	0.033	0.121
LOW	0.020	0.130	0.030	5.475	0.290	0.010	0.060	4.000	34.75	0.090	0.120	0.060	0.440	0.250	0.060
HIGH	0.090	0.560	0.280	40.400	0.810	0.230	0.570	5.810	87.50	0.250	0.130	0.250	1.060	0.310	0.380

HAKE, WHITE   UROPHYCIS TENUIS   033025   AREA- NORTH ATLANTIC   SITE- P1   MUSCLE

LENGTH NUM 3 MEAN 0.726 S. D. 0.208 LOW 0.497 HIGH 0.905
WEIGHT NUM 3 MEAN 4.340 S. D. 3.335 LOW 0.545 HIGH 6.804

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0002	0000	0000	0002	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.137	0.323	0.030	9.294	0.478	0.020	0.191	0.107	2.50	0.402	0.870	0.410	0.162	0.625	0.558
S. D.	0.120	0.166	0.000	6.086	0.024	0.000	0.083	0.029	0.40	0.093	0.000	0.000	0.095	0.430	0.125
LOW	0.015	0.210	0.000	2.950	0.460	0.000	0.116	0.085	2.23	0.295	0.000	0.000	0.090	0.130	0.415
HIGH	0.255	0.513	0.030	15.083	0.505	0.020	0.280	0.140	2.96	0.465	0.870	0.410	0.270	0.910	0.645

HAKE, WHITE   UROPHYCIS TENUIS   033025   AREA- NORTH ATLANTIC   SITE- P2   MUSCLE

LENGTH NUM 1 MEAN 0.454 S. D. 0.000 LOW 0.454 HIGH 0.454
WEIGHT NUM 1 MEAN 0.738 S. D. 0.000 LOW 0.738 HIGH 0.738

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0001	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.030	0.310	0.040	21.000	0.000	0.040	0.000	0.040	2.81	0.210	0.870	0.120	0.040	1.120	0.620
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.030	0.310	0.040	21.000	0.000	0.040	0.000	0.040	2.81	0.210	0.870	0.120	0.040	1.120	0.620

HAKE, WHITE   UROPHYCIS TENUIS   033025   AREA- NORTH ATLANTIC   SITE- P3   MUSCLE

LENGTH NUM 1 MEAN 0.451 S. D. 0.000 LOW 0.451 HIGH 0.451
WEIGHT NUM 1 MEAN 0.756 S. D. 0.000 LOW 0.756 HIGH 0.756

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0001	0000
MEAN	0.060	0.355	0.040	11.000	0.530	0.000	0.145	0.250	3.21	0.140	0.000	0.150	0.280	0.000	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.060	0.355	0.040	11.000	0.530	0.000	0.145	0.250	3.21	0.140	0.000	0.150	0.280	0.000	0.380

CUSK-EEL, FAWN   LEPOPHIDIUM CERVINUM   037004   AREA- NORTH ATLANTIC   SITE- P4   MUSCLE

LENGTH NUM 2 MEAN 0.216 S. D. 0.000 LOW 0.216 HIGH 0.216
WEIGHT NUM 2 MEAN 0.033 S. D. 0.000 LOW 0.033 HIGH 0.033

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.030	1.355	0.145	8.670	0.500	0.070	0.288	0.820	9.11	0.785	0.150	0.345	1.445	1.205	1.165
S. D.	0.014	0.198	0.049	0.000	0.000	0.000	0.011	0.099	2.27	0.403	0.000	0.007	0.629	1.450	0.474
LOW	0.020	1.215	0.110	0.000	0.000	0.070	0.280	0.750	7.50	0.500	0.150	0.340	1.000	0.180	0.830
HIGH	0.040	1.495	0.180	8.670	0.500	0.070	0.295	0.890	10.71	1.070	0.150	0.350	1.890	2.230	1.500

DOLPHIN   CORYPHAENA HIPPURUS   041002   AREA- SOUTH ATLANTIC   SITE- C2   MUSCLE

LENGTH NUM 11 MEAN 0.688 S. D. 0.070 LOW 0.650 HIGH 0.900
WEIGHT NUM 11 MEAN 2.317 S. D. 0.776 LOW 1.361 HIGH 4.536

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0010	0010	0011	0011	0010
N DET.	0001	0001	0003	0000	0000	0006	0000	0000	0000	0004	0008	0008	0000	0006	0000
MEAN	0.133	0.461	0.071	3.490	0.595	0.034	0.252	0.535	5.09	0.286	0.470	0.565	0.155	0.898	0.460
S. D.	0.179	0.224	0.031	1.375	0.257	0.009	0.267	0.147	0.89	0.083	0.042	0.092	0.118	0.512	0.105
LOW	0.010	0.130	0.040	1.770	0.140	0.020	0.040	0.310	3.67	0.210	0.440	0.500	0.040	0.450	0.315
HIGH	0.530	0.736	0.140	5.940	1.130	0.040	0.990	0.790	6.25	0.460	0.500	0.630	0.460	1.575	0.690

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

DOLPHIN CORYPHAENA HIPPURUS 041002 AREA- SOUTH ATLANTIC SITE- M1 MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH 0.000
WEIGHT	NUM	9	MEAN	4.335	S. D.	1.729	LOW	2.722	HIGH 7.257

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0001	0000	0000	0003	0001	0000	0000	0000	0007	0008	0001	0001	0000
MEAN	0.175	0.440	0.107	4.463	0.775	0.043	0.158	0.398	5.72	0.322	0.207	0.450	0.202	1.127	0.431
S. D.	0.114	0.183	0.029	1.406	0.148	0.008	0.072	0.079	2.19	0.130	0.144	0.354	0.089	0.431	0.146
LOW	0.035	0.140	0.055	1.875	0.520	0.030	0.070	0.300	3.23	0.175	0.100	0.200	0.113	0.525	0.250
HIGH	0.335	0.725	0.150	6.400	0.970	0.055	0.280	0.520	10.17	0.545	0.370	0.700	0.335	1.780	0.650

DOLPHIN CORYPHAENA HIPPURUS 041002 AREA- SOUTH ATLANTIC SITE- M1 LIVER

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH 0.000
WEIGHT	NUM	1	MEAN	4.627	S. D.	0.000	LOW	4.627	HIGH 4.627

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.110	0.150	0.980	3.120	1.865	0.010	0.000	1.900	28.90	0.100	0.500	0.200	0.460	0.700	0.650
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.110	0.150	0.980	3.120	1.865	0.010	0.000	1.900	28.90	0.100	0.500	0.200	0.460	0.700	0.650

DOLPHIN CORYPHAENA HIPPURUS 041002 AREA- GULF SITE- L5 MUSCLE

LENGTH	NUM	1	MEAN	1.403	S. D.	0.000	LOW	1.403	HIGH 1.403
WEIGHT	NUM	2	MEAN	11.123	S. D.	5.136	LOW	7.491	HIGH 14.755

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0002	0000
MEAN	0.350	0.345	0.055	3.875	0.770	0.030	0.160	0.625	4.32	0.205	0.000	0.000	0.090	0.000	0.545
S. D.	0.255	0.049	0.021	1.520	0.382	0.000	0.042	0.049	0.26	0.092	0.000	0.000	0.014	0.000	0.021
LOW	0.170	0.310	0.040	2.800	0.500	0.030	0.130	0.590	4.13	0.140	0.000	0.000	0.080	0.000	0.530
HIGH	0.530	0.380	0.070	4.950	1.040	0.030	0.190	0.660	4.50	0.270	0.000	0.000	0.100	0.000	0.560

DOLPHIN CORYPHAENA HIPPURUS 041002 AREA- HAWAII SITE- C3 MUSCLE

LENGTH	NUM	1	MEAN	0.829	S. D.	0.000	LOW	0.829	HIGH 0.829
WEIGHT	NUM	1	MEAN	4.783	S. D.	0.000	LOW	4.783	HIGH 4.783

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.040	0.630	0.210	0.900	0.370	0.020	0.140	1.130	3.69	0.160	0.200	0.000	0.060	0.810	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.040	0.630	0.210	0.900	0.370	0.020	0.140	1.130	3.69	0.160	0.200	0.000	0.060	0.810	0.000

DOLPHIN CORYPHAENA HIPPURUS 041002 AREA- HAWAII SITE- C3 LIVER

LENGTH	NUM	1	MEAN	0.829	S. D.	0.000	LOW	0.829	HIGH 0.829
WEIGHT	NUM	1	MEAN	4.783	S. D.	0.000	LOW	4.783	HIGH 4.783

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	0.500	1.290	2.300	0.000	0.050	0.130	5.630	18.44	0.150	0.250	0.250	0.620	0.630	0.310
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.500	1.290	2.300	0.000	0.050	0.130	5.630	18.44	0.150	0.250	0.250	0.620	0.630	0.310

DOLPHIN CORYPHAENA HIPPURUS 041002 AREA- HAWAII SITE- D5 MUSCLE

LENGTH	NUM	4	MEAN	0.585	S. D.	0.126	LOW	0.469	HIGH 0.731
WEIGHT	NUM	33	MEAN	9.590	S. D.	4.713	LOW	1.027	HIGH 20.412

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0033	0033	0033	0033	0031	0033	0033	0033	0033	0033	0033	0033	0033	0033	0032
N DET.	0002	0000	0000	0000	0000	0004	0000	0000	0000	0000	0017	0023	0000	0000	0000
MEAN	0.111	0.464	0.059	3.034	0.644	0.028	0.170	0.349	3.81	0.183	0.192	0.411	0.088	0.682	0.492
S. D.	0.085	0.232	0.023	1.096	0.222	0.013	0.116	0.161	1.26	0.053	0.137	0.259	0.026	0.265	0.155
LOW	0.020	0.060	0.030	1.433	0.140	0.015	0.060	0.110	2.12	0.090	0.060	0.060	0.050	0.155	0.190
HIGH	0.385	1.060	0.120	6.900	1.300	0.080	0.470	0.870	9.50	0.305	0.630	1.000	0.146	1.190	0.750

DOLPHIN CORYPHAENA HIPPURUS 041002 AREA- HAWAII SITE- D5 LIVER

LENGTH	NUM	1	MEAN	0.585	S. D.	0.000	LOW	0.585	HIGH 0.585
WEIGHT	NUM	21	MEAN	11.200	S. D.	4.737	LOW	2.038	HIGH 20.412

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0021	0020	0021	0020	0011	0021	0020	0021	0019	0021	0021	0021	0021	0021	0019
N DET.	0010	0000	0000	0000	0000	0002	0001	0000	0000	0000	0005	0019	0000	0000	0000
MEAN	0.036	0.596	1.988	3.852	1.995	0.043	0.215	9.253	24.14	0.219	0.464	0.265	1.031	0.770	0.585
S. D.	0.030	0.362	0.850	2.461	0.717	0.025	0.142	7.179	6.74	0.106	0.206	0.064	0.483	0.386	0.236
LOW	0.020	0.060	0.490	0.700	1.300	0.010	0.040	2.050	10.63	0.060	0.220	0.220	0.200	0.250	0.310
HIGH	0.120	1.380	3.800	10.450	3.675	0.110	0.630	28.280	34.37	0.480	1.000	0.310	1.810	1.500	1.250

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

DOLPHIN CORYPHAENA HIPPURUS 041002 AREA- HAWAII SITE- E7 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 5 MEAN 7.167 S. D. 2.999 LOW 4.536 HIGH 10.433

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000	0003	0004	0000	0001	0000
MEAN	0.113	0.312	0.065	3.466	0.490	0.028	0.166	0.307	3.70	0.197	0.075	0.230	0.087	0.545	0.481
S. D.	0.090	0.187	0.030	1.142	0.175	0.008	0.074	0.139	1.06	0.033	0.021	0.000	0.024	0.477	0.098
LOW	0.040	0.160	0.035	2.100	0.300	0.020	0.073	0.125	2.81	0.170	0.060	0.000	0.060	0.060	0.375
HIGH	0.240	0.630	0.110	4.587	0.690	0.040	0.250	0.450	5.53	0.235	0.090	0.230	0.125	1.190	0.625

DOLPHIN CORYPHAENA HIPPURUS 041002 AREA- HAWAII SITE- E7 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 5 MEAN 7.167 S. D. 2.999 LOW 4.536 HIGH 10.433

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0003	0001	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0003	0000	0000	0000	0000	0002	0000	0000	0000	0000	0001	0004	0000	0000	0000
MEAN	0.065	0.610	2.680	4.764	1.490	0.020	0.118	9.210	28.96	0.162	0.463	0.310	0.924	0.744	0.388
S. D.	0.035	0.172	1.926	2.360	0.000	0.017	0.095	7.795	5.67	0.064	0.075	0.000	0.259	0.460	0.145
LOW	0.040	0.440	1.190	2.350	0.000	0.010	0.060	1.270	21.25	0.080	0.380	0.000	0.560	0.250	0.250
HIGH	0.090	0.870	5.990	7.067	1.490	0.040	0.280	21.650	36.25	0.230	0.560	0.310	1.170	1.440	0.630

DOLPHIN CORYPHAENA HIPPURUS 041002 AREA- HAWAII SITE- K1 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 5.889 S. D. 0.000 LOW 5.889 HIGH 5.889

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.105	0.345	0.045	1.533	0.530	0.015	0.160	0.420	3.28	0.190	0.000	0.000	0.085	0.060	0.355
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.105	0.345	0.045	1.533	0.530	0.015	0.160	0.420	3.28	0.190	0.000	0.000	0.085	0.060	0.355

PERCH, SILVER BAIRDIELLA CHRYSURA 045003 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH NUM 10 MEAN 0.209 S. D. 0.000 LOW 0.209 HIGH 0.209
WEIGHT NUM 10 MEAN 0.113 S. D. 0.000 LOW 0.113 HIGH 0.113

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0008	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0005	0002	0000	0000	0000
MEAN	0.138	0.620	0.071	2.133	0.687	0.044	0.175	0.440	6.56	0.232	0.288	0.331	0.202	0.805	0.562
S. D.	0.037	0.256	0.042	0.639	0.193	0.016	0.073	0.150	1.40	0.076	0.097	0.138	0.059	0.432	0.158
LOW	0.070	0.326	0.020	1.000	0.460	0.010	0.090	0.235	5.12	0.140	0.190	0.190	0.140	0.380	0.250
HIGH	0.190	1.130	0.140	3.230	0.945	0.065	0.295	0.665	9.06	0.410	0.410	0.630	0.330	1.690	0.780

PERCH, SILVER BAIRDIELLA CHRYSURA 045003 AREA- SOUTH ATLANTIC SITE- J4 MUSCLE

LENGTH NUM 10 MEAN 0.172 S. D. 0.006 LOW 0.160 HIGH 0.183
WEIGHT NUM 10 MEAN 0.130 S. D. 0.015 LOW 0.105 HIGH 0.148

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0001	0000	0000	0003	0000	0000	0000	0001	0008	0007	0000	0003	0000
MEAN	0.060	0.548	0.088	7.444	0.505	0.041	0.183	0.219	7.35	0.331	0.205	0.377	0.187	0.921	0.708
S. D.	0.018	0.279	0.041	5.711	0.132	0.013	0.063	0.076	1.43	0.141	0.205	0.125	0.083	0.254	0.249
LOW	0.025	0.350	0.035	0.900	0.250	0.030	0.095	0.140	4.82	0.150	0.060	0.250	0.070	0.530	0.400
HIGH	0.080	1.120	0.150	19.820	0.705	0.070	0.286	0.385	9.46	0.532	0.350	0.500	0.380	1.350	1.150

SEATROUT, SAND CYNOSCION ARENARIUS 045007 AREA- GULF SITE- B7 MUSCLE

LENGTH NUM 4 MEAN 0.198 S. D. 0.038 LOW 0.160 HIGH 0.250
WEIGHT NUM 4 MEAN 0.101 S. D. 0.049 LOW 0.056 HIGH 0.170

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0004	0000	0000	0000
MEAN	0.040	0.418	0.079	2.090	0.753	0.034	0.173	0.369	4.97	0.205	0.000	0.000	0.183	0.783	0.668
S. D.	0.020	0.074	0.009	0.829	0.308	0.009	0.080	0.112	0.55	0.087	0.000	0.000	0.064	0.196	0.253
LOW	0.020	0.310	0.070	1.333	0.375	0.020	0.060	0.265	4.25	0.130	0.000	0.000	0.125	0.500	0.380
HIGH	0.060	0.480	0.090	3.200	1.096	0.040	0.250	0.480	5.56	0.315	0.000	0.000	0.250	0.940	0.880

SEATROUT, SAND CYNOSCION ARENARIUS 045007 AREA- GULF SITE- B8 MUSCLE

LENGTH NUM 2 MEAN 0.271 S. D. 0.120 LOW 0.186 HIGH 0.355
WEIGHT NUM 3 MEAN 0.342 S. D. 0.490 LOW 0.041 HIGH 0.908

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0001	0000	0000	0002	0000	0000	0000	0001	0003	0002	0000	0001	0000
MEAN	0.047	0.545	0.055	2.608	0.882	0.035	0.202	0.318	5.25	0.148	0.000	0.150	0.215	0.575	0.600
S. D.	0.025	0.255	0.021	1.125	0.188	0.000	0.028	0.186	0.89	0.053	0.000	0.000	0.101	0.304	0.092
LOW	0.020	0.260	0.040	1.400	0.700	0.000	0.170	0.180	4.23	0.110	0.000	0.000	0.140	0.360	0.520
HIGH	0.070	0.750	0.070	3.625	1.075	0.035	0.220	0.530	5.84	0.185	0.000	0.150	0.330	0.790	0.700

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SEATROUT, SAND CYNOSCION ARENARIUS 045007 AREA- GULF SITE- H1 MUSCLE

LENGTH NUM 5 MEAN 0.195 S. D. 0.020 LOW 0.170 HIGH 0.220
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0003	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0003	0000	0000	0000
MEAN	0.060	0.521	0.064	1.664	0.578	0.045	0.155	0.536	5.43	0.251	0.150	0.440	0.309	0.687	0.709
S. D.	0.042	0.064	0.038	0.808	0.200	0.006	0.067	0.359	0.51	0.039	0.032	0.000	0.111	0.158	0.127
LOW	0.030	0.440	0.020	0.735	0.350	0.040	0.073	0.260	4.81	0.210	0.120	0.440	0.170	0.500	0.540
HIGH	0.090	0.606	0.120	2.650	0.860	0.050	0.250	1.030	6.00	0.290	0.190	0.440	0.470	0.880	0.870

SEATROUT, SAND CYNOSCION ARENARIUS 045007 AREA- GULF SITE- L5 MUSCLE

LENGTH NUM 6 MEAN 0.227 S. D. 0.013 LOW 0.210 HIGH 0.245
WEIGHT NUM 6 MEAN 0.179 S. D. 0.041 LOW 0.135 HIGH 0.232

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0003	0000	0001	0000
MEAN	0.359	0.424	0.059	2.678	0.784	0.037	0.141	0.239	4.14	0.208	0.108	0.217	0.127	0.806	0.564
S. D.	0.080	0.278	0.015	0.982	0.262	0.012	0.050	0.127	1.37	0.078	0.062	0.137	0.030	0.248	0.153
LOW	0.265	0.250	0.035	1.775	0.535	0.020	0.085	0.070	1.69	0.120	0.060	0.060	0.090	0.500	0.370
HIGH	0.490	0.965	0.076	4.100	1.255	0.050	0.223	0.406	5.15	0.340	0.190	0.310	0.160	1.060	0.835

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- NORTH ATLANTIC SITE- R8 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0001	0003	0000	0000	0003	0000	0000	0000	0004	0008	0008	0001	0003	0000
MEAN	0.109	0.367	0.056	2.230	0.544	0.049	0.164	0.317	3.88	0.194	0.330	0.270	0.221	0.966	0.440
S. D.	0.054	0.120	0.027	1.514	0.120	0.042	0.079	0.106	1.00	0.070	0.240	0.240	0.108	0.719	0.131
LOW	0.050	0.250	0.035	0.795	0.340	0.010	0.065	0.195	2.89	0.120	0.160	0.100	0.040	0.190	0.100
HIGH	0.185	0.535	0.110	5.620	0.720	0.140	0.300	0.530	6.07	0.320	0.500	0.440	0.430	1.930	0.575

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- NORTH ATLANTIC SITE- R8 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.020	0.310	0.100	0.100	0.870	0.030	0.050	5.060	11.87	0.180	0.120	0.000	0.810	0.880	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.310	0.100	0.100	0.870	0.030	0.050	5.060	11.87	0.180	0.120	0.000	0.810	0.880	0.000

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- SOUTH ATLANTIC SITE- F3 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 0.411 S. D. 0.000 LOW 0.411 HIGH 0.411

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0009	0009	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0001	0002	0003	0001	0000	0005	0000	0000	0000	0000	0006	0006	0000	0004	0000
MEAN	0.117	0.416	0.074	2.549	0.713	0.022	0.232	0.299	4.52	0.302	0.158	0.332	0.137	0.820	0.487
S. D.	0.104	0.163	0.061	1.143	0.267	0.012	0.157	0.159	1.41	0.217	0.074	0.186	0.053	0.206	0.152
LOW	0.020	0.250	0.020	1.500	0.413	0.010	0.060	0.190	2.85	0.040	0.060	0.060	0.060	0.470	0.275
HIGH	0.350	0.810	0.200	4.750	1.245	0.040	0.505	0.740	7.50	0.610	0.220	0.500	0.230	1.100	0.810

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- SOUTH ATLANTIC SITE- J4 MUSCLE

LENGTH NUM 4 MEAN 0.357 S. D. 0.025 LOW 0.326 HIGH 0.381
WEIGHT NUM 2 MEAN 0.490 S. D. 0.045 LOW 0.458 HIGH 0.521

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0002	0000	0000	0003	0000	0000	0000	0001	0003	0003	0000	0001	0000
MEAN	0.290	0.458	0.115	3.683	0.566	0.020	0.396	0.225	4.96	0.323	0.150	0.300	0.133	0.638	0.428
S. D.	0.030	0.174	0.035	0.847	0.291	0.000	0.254	0.040	0.55	0.143	0.000	0.000	0.079	0.314	0.175
LOW	0.255	0.230	0.090	2.650	0.305	0.000	0.100	0.200	4.38	0.200	0.000	0.000	0.070	0.345	0.250
HIGH	0.320	0.650	0.140	4.400	0.930	0.020	0.705	0.285	5.69	0.480	0.150	0.300	0.245	0.970	0.660

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- SOUTH ATLANTIC SITE- M1 MUSCLE

LENGTH NUM 3 MEAN 0.420 S. D. 0.066 LOW 0.374 HIGH 0.495
WEIGHT NUM 2 MEAN 1.023 S. D. 1.082 LOW 0.258 HIGH 1.788

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0001	0002	0000	0000	0001	0000	0000	0000	0001	0003	0003	0001	0002	0000
MEAN	0.710	0.299	0.130	1.207	0.463	0.035	0.152	0.250	4.66	0.320	0.000	0.000	0.175	0.575	0.458
S. D.	0.428	0.062	0.000	1.007	0.234	0.007	0.048	0.061	1.25	0.057	0.000	0.000	0.148	0.000	0.095
LOW	0.370	0.255	0.000	0.500	0.290	0.030	0.100	0.180	3.71	0.280	0.000	0.000	0.070	0.000	0.350
HIGH	1.190	0.343	0.130	2.360	0.730	0.040	0.195	0.290	6.07	0.360	0.000	0.000	0.280	0.575	0.525

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- GULF SITE- B8 MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH	
LENGTH	NUM	3	MEAN	0.387	S. D.	0.117	LOW	0.266	HIGH	0.500
WEIGHT	NUM	3	MEAN	0.613	S. D.	0.305	LOW	0.280	HIGH	0.879

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0004
N DET.	0000	0000	0004	0000	0000	0004	0000	0001	0000	0000	0004	0004	0000	0001	0000
MEAN	0.170	0.535	0.040	3.431	0.710	0.020	0.255	0.434	3.80	0.307	0.080	0.280	0.214	1.238	0.518
S. D.	0.124	0.293	0.000	1.870	0.166	0.000	0.105	0.400	1.32	0.103	0.000	0.000	0.139	0.805	0.046
LOW	0.100	0.200	0.000	0.800	0.520	0.000	0.085	0.125	2.34	0.210	0.000	0.000	0.075	0.250	0.450
HIGH	0.390	0.990	0.040	6.000	0.950	0.020	0.365	1.010	5.85	0.460	0.080	0.280	0.445	2.100	0.550

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- GULF SITE- D5 MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH	
LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	1	MEAN	0.131	S. D.	0.000	LOW	0.131	HIGH	0.131

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0013	0013	0013	0013	0013	0012	0012	0012	0013	0013	0013	0013	0013	0012
N DET.	0000	0000	0001	0001	0000	0000	0000	0000	0000	0000	0009	0010	0000	0002	0000
MEAN	0.162	0.468	0.091	2.132	0.660	0.049	0.165	0.327	3.90	0.216	0.173	0.420	0.182	0.730	0.607
S. D.	0.057	0.307	0.054	1.355	0.251	0.041	0.105	0.304	0.72	0.092	0.147	0.312	0.061	0.263	0.234
LOW	0.095	0.020	0.035	0.725	0.350	0.020	0.060	0.060	3.03	0.125	0.060	0.220	0.110	0.280	0.400
HIGH	0.305	1.120	0.220	5.000	1.290	0.180	0.370	1.250	5.74	0.415	0.370	0.780	0.330	1.310	1.300

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- GULF SITE- D5 LIVER

	NUM		MEAN		S. D.		LOW		HIGH	
LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.020	0.350	0.000	3.650	1.800	0.000	0.255	3.860	13.21	0.360	0.000	0.000	0.530	0.800	0.780
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.350	0.000	3.650	1.800	0.000	0.255	3.860	13.21	0.360	0.000	0.000	0.530	0.800	0.780

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- GULF SITE- E5 MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH	
LENGTH	NUM	20	MEAN	0.450	S. D.	0.068	LOW	0.343	HIGH	0.576
WEIGHT	NUM	20	MEAN	0.901	S. D.	0.369	LOW	0.404	HIGH	1.735

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0000	0000	0003	0000	0000	0004	0001	0000	0000	0001	0017	0015	0001	0004	0000
MEAN	0.543	0.467	0.070	1.873	0.757	0.053	0.213	0.211	4.14	0.278	0.097	0.366	0.124	0.722	0.460
S. D.	0.212	0.257	0.027	0.948	0.295	0.042	0.223	0.080	1.08	0.190	0.035	0.226	0.048	0.292	0.099
LOW	0.250	0.050	0.040	0.150	0.170	0.030	0.060	0.090	2.88	0.110	0.060	0.190	0.040	0.440	0.325
HIGH	0.865	1.070	0.140	3.630	1.325	0.190	0.925	0.370	7.50	0.820	0.130	0.750	0.250	1.450	0.630

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- GULF SITE- E5 LIVER

	NUM		MEAN		S. D.		LOW		HIGH	
LENGTH	NUM	1	MEAN	0.414	S. D.	0.000	LOW	0.414	HIGH	0.414
WEIGHT	NUM	1	MEAN	0.779	S. D.	0.000	LOW	0.779	HIGH	0.779

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.240	0.440	0.140	1.000	1.630	0.060	0.120	10.060	31.25	0.280	0.060	0.000	1.010	0.500	0.560
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.240	0.440	0.140	1.000	1.630	0.060	0.120	10.060	31.25	0.280	0.060	0.000	1.010	0.500	0.560

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- GULF SITE- G3 MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH	
LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	1	MEAN	0.058	S. D.	0.000	LOW	0.058	HIGH	0.058

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0002	0002	0000	0000	0001	0001	0000	0000	0002	0003	0003	0000	0002	0000
MEAN	0.253	0.375	0.060	0.798	0.860	0.185	0.148	0.203	4.94	0.260	0.000	0.000	0.100	0.310	0.525
S. D.	0.086	0.000	0.000	0.474	0.285	0.205	0.004	0.071	1.26	0.000	0.000	0.000	0.052	0.000	0.025
LOW	0.160	0.000	0.000	0.408	0.610	0.040	0.145	0.140	3.57	0.000	0.000	0.000	0.070	0.000	0.500
HIGH	0.330	0.375	0.060	1.325	1.170	0.330	0.150	0.280	6.06	0.260	0.000	0.000	0.160	0.310	0.550

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- GULF SITE- G5 MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH	
LENGTH	NUM	1	MEAN	0.630	S. D.	0.000	LOW	0.630	HIGH	0.630
WEIGHT	NUM	1	MEAN	2.497	S. D.	0.000	LOW	2.497	HIGH	2.497

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.090	0.565	0.055	4.500	0.615	0.040	0.315	0.110	3.21	0.180	0.000	0.000	0.085	0.000	0.455
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.090	0.565	0.055	4.500	0.615	0.040	0.315	0.110	3.21	0.180	0.000	0.000	0.085	0.000	0.455

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- GULF SITE- G8 MUSCLE

LENGTH	NUM	8	MEAN	0.428	S. D.	0.034	LOW	0.384	HIGH	0.495
WEIGHT	NUM	8	MEAN	0.822	S. D.	0.287	LOW	0.340	HIGH	1.362

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0007	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0008	0007	0000	0000	0000
MEAN	0.181	0.787	0.096	2.387	1.112	0.024	0.422	0.276	4.57	0.197	0.000	0.190	0.208	0.788	0.446
S. D.	0.114	0.372	0.041	0.829	0.288	0.012	0.364	0.091	0.61	0.068	0.000	0.000	0.101	0.150	0.100
LOW	0.070	0.380	0.050	0.723	0.730	0.010	0.130	0.200	3.81	0.100	0.000	0.000	0.140	0.630	0.310
HIGH	0.430	1.250	0.180	3.500	1.650	0.040	1.190	0.480	5.63	0.275	0.000	0.190	0.440	1.000	0.630

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- GULF SITE- L5 MUSCLE

LENGTH	NUM	10	MEAN	0.226	S. D.	0.038	LOW	0.140	HIGH	0.264
WEIGHT	NUM	10	MEAN	0.200	S. D.	0.071	LOW	0.128	HIGH	0.325

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0002	0003	0001	0000	0003	0001	0001	0000	0005	0008	0008	0000	0002	0000
MEAN	0.194	0.513	0.049	2.984	0.476	0.089	0.177	0.186	5.61	0.312	0.195	0.175	0.165	0.821	0.536
S. D.	0.071	0.257	0.025	1.703	0.258	0.084	0.095	0.065	3.03	0.288	0.219	0.035	0.082	0.382	0.231
LOW	0.110	0.270	0.020	1.645	0.050	0.030	0.050	0.070	3.21	0.120	0.040	0.150	0.030	0.480	0.315
HIGH	0.320	1.000	0.095	7.330	0.905	0.210	0.356	0.250	13.48	0.820	0.350	0.200	0.290	1.710	0.900

SEATROUT, SPOTTED (SPECKLED) CYNOSCION NEBULOSUS 045008 AREA- GULF SITE- R3 MUSCLE

LENGTH	NUM	1	MEAN	0.387	S. D.	0.000	LOW	0.387	HIGH	0.387
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0001	0000	0000	0001	0001	0000	0001	0000
MEAN	0.530	0.290	0.070	3.250	1.160	0.000	0.070	0.000	3.57	0.290	0.000	0.000	0.430	0.000	0.500
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.530	0.290	0.070	3.250	1.160	0.000	0.070	0.000	3.57	0.290	0.000	0.000	0.430	0.000	0.500

SEATROUT, SILVER (WHITE) CYNOSCION NOTHUS 045010 AREA- GULF SITE- B8 MUSCLE

LENGTH	NUM	1	MEAN	0.300	S. D.	0.000	LOW	0.300	HIGH	0.300
WEIGHT	NUM	1	MEAN	0.454	S. D.	0.000	LOW	0.454	HIGH	0.454

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.000	1.410	0.110	0.850	0.600	0.000	0.090	0.270	3.85	0.240	0.000	0.000	0.230	0.890	0.220
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	1.410	0.110	0.850	0.600	0.000	0.090	0.270	3.85	0.240	0.000	0.000	0.230	0.890	0.220

SEATROUT, SILVER (WHITE) CYNOSCION NOTHUS 045010 AREA- GULF SITE- C7 MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0007	0010	0009	0009	0010	0009	0010	0010	0010	0010	0010	0010	0010	0007
N DET.	0003	0000	0000	0001	0000	0003	0001	0000	0000	0000	0010	0008	0002	0001	0000
MEAN	0.069	0.230	0.077	2.335	0.926	0.021	0.159	0.208	3.76	0.146	0.000	0.125	0.127	0.643	0.702
S. D.	0.046	0.102	0.057	0.786	0.257	0.012	0.102	0.061	0.42	0.051	0.000	0.092	0.036	0.211	0.428
LOW	0.020	0.130	0.040	1.250	0.625	0.010	0.060	0.130	3.13	0.080	0.000	0.060	0.080	0.380	0.380
HIGH	0.140	0.440	0.200	3.250	1.500	0.040	0.380	0.300	4.69	0.230	0.000	0.190	0.190	1.000	1.600

SEATROUT, SILVER (WHITE) CYNOSCION NOTHUS 045010 AREA- GULF SITE- D4 MUSCLE

LENGTH	NUM	10	MEAN	0.265	S. D.	0.030	LOW	0.231	HIGH	0.315
WEIGHT	NUM	10	MEAN	0.219	S. D.	0.071	LOW	0.143	HIGH	0.351

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0008	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0009	0010	0009
N DET.	0002	0000	0000	0001	0000	0002	0000	0000	0000	0000	0008	0010	0000	0000	0000
MEAN	0.046	0.378	0.088	2.467	0.624	0.024	0.124	0.222	4.36	0.156	0.165	0.000	0.124	0.625	0.473
S. D.	0.024	0.204	0.052	1.496	0.223	0.010	0.115	0.088	0.49	0.046	0.120	0.000	0.023	0.162	0.201
LOW	0.020	0.130	0.040	0.900	0.330	0.010	0.060	0.080	3.50	0.080	0.080	0.000	0.090	0.380	0.220
HIGH	0.090	0.810	0.180	6.000	0.980	0.035	0.380	0.380	5.19	0.230	0.250	0.000	0.160	0.880	0.880

SEATROUT, SILVER (WHITE) CYNOSCION NOTHUS 045010 AREA- GULF SITE- D5 MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0011
N DET.	0002	0000	0000	0000	0000	0001	0000	0000	0000	0000	0008	0009	0000	0003	0000
MEAN	0.114	0.296	0.046	2.259	0.674	0.034	0.205	0.305	3.67	0.183	0.120	0.305	0.143	0.723	0.548
S. D.	0.026	0.116	0.018	2.029	0.201	0.017	0.213	0.120	1.30	0.095	0.062	0.235	0.065	0.216	0.304
LOW	0.060	0.130	0.020	0.390	0.300	0.010	0.060	0.060	0.88	0.080	0.050	0.090	0.030	0.310	0.030
HIGH	0.160	0.500	0.080	8.213	1.060	0.070	0.870	0.560	6.75	0.425	0.190	0.630	0.250	1.000	1.115

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SEATROUT, SILVER (WHITE) CYNOSCION NOTHUS 045010 AREA- GULF SITE- D5 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.090	1.000	0.450	1.455	1.180	0.060	0.120	10.620	34.37	0.590	0.190	0.000	1.310	0.940	1.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.090	1.000	0.450	1.455	1.180	0.060	0.120	10.620	34.37	0.590	0.190	0.000	1.310	0.940	1.000

SEATROUT, SILVER (WHITE) CYNOSCION NOTHUS 045010 AREA- GULF SITE- D6 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0007
N DET.	0005	0000	0000	0000	0000	0003	0001	0000	0000	0000	0009	0009	0002	0000	0000
MEAN	0.100	0.531	0.077	2.697	0.941	0.044	0.231	0.234	3.83	0.174	0.080	0.300	0.143	0.625	0.911
S. D.	0.079	0.486	0.037	1.304	0.224	0.054	0.206	0.041	0.42	0.074	0.000	0.000	0.077	0.177	1.043
LOW	0.020	0.130	0.030	0.750	0.500	0.010	0.060	0.190	3.13	0.090	0.000	0.000	0.090	0.440	0.380
HIGH	0.200	1.690	0.150	5.275	1.190	0.165	0.630	0.310	4.38	0.310	0.080	0.300	0.330	0.940	3.250

SEATROUT, GRAY (WEAKFISH) CYNOSCION REGALIS 045012 AREA- NORTH ATLANTIC SITE- M9 MUSCLE

LENGTH NUM 8 MEAN 0.182 S. D. 0.012 LOW 0.162 HIGH 0.203
WEIGHT NUM 8 MEAN 0.074 S. D. 0.009 LOW 0.064 HIGH 0.092

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0007	0008	0008	0008	0008	0007	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0008	0008	0000	0007	0000
MEAN	0.049	0.471	0.071	2.041	0.542	0.036	0.146	0.284	5.10	0.234	0.000	0.000	0.178	0.410	0.494
S. D.	0.027	0.117	0.022	0.728	0.159	0.010	0.077	0.096	0.38	0.054	0.000	0.000	0.076	0.000	0.059
LOW	0.020	0.310	0.040	1.015	0.320	0.020	0.060	0.155	4.56	0.160	0.000	0.000	0.130	0.000	0.440
HIGH	0.090	0.625	0.110	3.050	0.783	0.055	0.285	0.390	5.62	0.310	0.000	0.000	0.355	0.410	0.630

SEATROUT, GRAY (WEAKFISH) CYNOSCION REGALIS 045012 AREA- NORTH ATLANTIC SITE- N2 MUSCLE

LENGTH NUM 10 MEAN 0.528 S. D. 0.042 LOW 0.458 HIGH 0.589
WEIGHT NUM 10 MEAN 1.380 S. D. 0.312 LOW 1.007 HIGH 1.841

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0001	0001	0000	0000	0004	0001	0000	0000	0001	0005	0004	0000	0004	0000
MEAN	0.176	0.345	0.046	2.211	0.610	0.032	0.180	0.291	5.10	0.205	0.268	0.463	0.086	0.703	0.504
S. D.	0.067	0.135	0.015	1.227	0.141	0.021	0.068	0.115	2.42	0.113	0.238	0.143	0.026	0.099	0.119
LOW	0.110	0.140	0.030	0.495	0.400	0.010	0.085	0.170	2.19	0.070	0.030	0.280	0.040	0.590	0.400
HIGH	0.290	0.505	0.070	4.200	0.870	0.070	0.300	0.485	10.36	0.430	0.620	0.630	0.140	0.810	0.810

SEATROUT, GRAY (WEAKFISH) CYNOSCION REGALIS 045012 AREA- NORTH ATLANTIC SITE- N2 LIVER

LENGTH NUM 1 MEAN 0.528 S. D. 0.000 LOW 0.528 HIGH 0.528
WEIGHT NUM 1 MEAN 1.380 S. D. 0.000 LOW 1.380 HIGH 1.380

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.105	0.450	0.325	2.010	1.385	0.055	0.180	6.325	25.89	0.360	0.150	0.000	1.160	0.530	0.325
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.105	0.450	0.325	2.010	1.385	0.055	0.180	6.325	25.89	0.360	0.150	0.000	1.160	0.530	0.325

SEATROUT, GRAY (WEAKFISH) CYNOSCION REGALIS 045012 AREA- NORTH ATLANTIC SITE- N7 MUSCLE

LENGTH NUM 4 MEAN 0.270 S. D. 0.161 LOW 0.152 HIGH 0.500
WEIGHT NUM 3 MEAN 0.102 S. D. 0.082 LOW 0.055 HIGH 0.197

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0004	0004	0004	0004	0004	0004	0004	0003	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0004	0000	0003	0000
MEAN	0.112	0.396	0.080	0.573	0.618	0.028	0.276	0.281	5.09	0.263	0.000	0.000	0.148	1.080	0.466
S. D.	0.098	0.112	0.008	0.248	0.059	0.005	0.222	0.104	1.21	0.113	0.000	0.000	0.083	0.000	0.183
LOW	0.050	0.310	0.070	0.250	0.550	0.020	0.120	0.190	3.72	0.120	0.000	0.000	0.060	0.000	0.305
HIGH	0.225	0.560	0.090	0.800	0.690	0.030	0.605	0.390	6.00	0.390	0.000	0.000	0.260	1.080	0.630

SEATROUT, GRAY (WEAKFISH) CYNOSCION REGALIS 045012 AREA- NORTH ATLANTIC SITE- N7 LIVER

LENGTH NUM 1 MEAN 0.500 S. D. 0.000 LOW 0.500 HIGH 0.500
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0000	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.020	0.500	0.190	0.000	0.000	0.050	0.060	6.880	26.88	0.400	0.000	0.000	0.400	0.690	0.500
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.500	0.190	0.000	0.000	0.050	0.060	6.880	26.88	0.400	0.000	0.000	0.400	0.690	0.500

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

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LOCATION LEVEL 5

SEATROUT, GRAY (WEAKFISH) CYNOSCION REGALIS 045012 AREA- NORTH ATLANTIC SITE- R9 WHOLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	10	0.154	0.016	0.128	0.185
WEIGHT	9	0.033	0.007	0.026	0.047

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.068	1.062	0.127	2.881	0.766	0.111	0.334	0.443	13.95	0.399	0.248	0.445	1.230	1.526	1.459
S. D.	0.074	0.180	0.024	0.656	0.163	0.018	0.067	0.059	1.37	0.092	0.064	0.095	0.270	0.451	0.238
LOW	0.020	0.860	0.105	2.150	0.515	0.065	0.250	0.330	12.53	0.260	0.120	0.295	0.820	0.630	1.095
HIGH	0.215	1.445	0.180	4.050	1.055	0.130	0.470	0.520	16.88	0.530	0.340	0.625	1.630	2.190	1.940

SEATROUT, GRAY (WEAKFISH) CYNOSCION REGALIS 045012 AREA- NORTH ATLANTIC SITE- R9 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	30	0.500	0.047	0.382	0.593
WEIGHT	30	1.149	0.352	0.532	1.784

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0030	0029	0030	0030	0029	0030	0030	0030	0030	0030	0030	0030	0030	0030	0030
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0019	0021	0000	0000	0000
MEAN	0.151	0.494	0.054	2.259	0.538	0.032	0.159	0.366	3.96	0.185	0.138	0.208	0.095	0.625	0.524
S. D.	0.047	0.243	0.019	1.373	0.180	0.017	0.124	0.100	0.96	0.046	0.088	0.211	0.037	0.182	0.203
LOW	0.070	0.125	0.030	0.350	0.080	0.010	0.060	0.185	2.25	0.090	0.060	0.060	0.050	0.220	0.160
HIGH	0.225	1.065	0.090	5.000	0.900	0.085	0.620	0.660	6.63	0.280	0.330	0.630	0.220	0.940	1.060

SEATROUT, GRAY (WEAKFISH) CYNOSCION REGALIS 045012 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	20	0.346	0.116	0.232	0.459
WEIGHT	20	0.522	0.397	0.135	0.908

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0000	0000	0003	0001	0000	0009	0000	0000	0000	0000	0014	0014	0000	0003	0000
MEAN	0.101	0.488	0.063	1.639	0.613	0.039	0.223	0.217	4.88	0.241	0.177	0.380	0.186	0.750	0.499
S. D.	0.050	0.221	0.028	0.829	0.213	0.036	0.127	0.076	1.12	0.098	0.093	0.216	0.081	0.337	0.299
LOW	0.020	0.173	0.030	0.150	0.225	0.010	0.055	0.080	2.72	0.070	0.060	0.150	0.105	0.355	0.180
HIGH	0.210	1.065	0.150	3.250	1.050	0.140	0.510	0.360	7.78	0.580	0.340	0.630	0.480	1.810	1.500

SEATROUT, GRAY (WEAKFISH) CYNOSCION REGALIS 045012 AREA- SOUTH ATLANTIC SITE- C2 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.459	0.000	0.459	0.459
WEIGHT	1	0.908	0.000	0.908	0.908

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.020	0.250	0.190	1.965	1.420	0.030	0.060	3.440	13.25	0.200	0.130	0.060	1.310	0.470	0.310
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.250	0.190	1.965	1.420	0.030	0.060	3.440	13.25	0.200	0.130	0.060	1.310	0.470	0.310

DRUM, BANDED LARIMUS FASCIATUS 045019 AREA- NORTH ATLANTIC SITE- R9 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	3	0.147	0.009	0.140	0.158
WEIGHT	3	0.103	0.019	0.086	0.123

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0003	0000
MEAN	0.040	0.385	0.088	5.108	0.502	0.040	0.700	0.298	5.68	0.245	0.000	0.130	0.252	0.000	0.648
S. D.	0.000	0.101	0.028	1.210	0.104	0.009	0.447	0.252	0.50	0.030	0.000	0.000	0.013	0.000	0.099
LOW	0.000	0.310	0.070	4.000	0.425	0.030	0.315	0.020	5.25	0.210	0.000	0.000	0.240	0.000	0.560
HIGH	0.040	0.500	0.120	6.400	0.620	0.045	1.190	0.510	6.22	0.265	0.000	0.130	0.265	0.000	0.755

DRUM, BANDED LARIMUS FASCIATUS 045019 AREA- SOUTH ATLANTIC SITE- F6 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	2	0.158	0.008	0.152	0.163
WEIGHT	2	0.065	0.008	0.059	0.071

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.053	0.750	0.055	22.825	0.565	0.110	0.105	0.490	5.60	0.373	0.100	0.165	0.320	1.168	0.758
S. D.	0.046	0.075	0.021	18.137	0.021	0.000	0.049	0.064	0.67	0.258	0.000	0.049	0.127	0.117	0.308
LOW	0.020	0.697	0.040	10.000	0.550	0.000	0.070	0.445	5.12	0.190	0.000	0.130	0.230	1.085	0.540
HIGH	0.085	0.803	0.070	35.650	0.580	0.110	0.140	0.535	6.07	0.555	0.100	0.200	0.410	1.250	0.975

SPOT LEIOSTOMUS XANTHURUS 045020 AREA- NORTH ATLANTIC SITE- M9 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	7	0.159	0.008	0.147	0.170
WEIGHT	7	0.074	0.009	0.065	0.090

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0006	0007	0007	0007	0007	0007	0007
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0007	0006	0000	0007	0000
MEAN	0.028	0.498	0.078	2.674	0.628	0.036	0.469	0.404	5.07	0.242	0.000	0.190	0.266	0.000	0.459
S. D.	0.015	0.201	0.018	2.149	0.155	0.011	0.190	0.085	0.39	0.074	0.000	0.000	0.043	0.000	0.148
LOW	0.020	0.345	0.060	0.500	0.380	0.020	0.250	0.230	4.63	0.110	0.000	0.000	0.180	0.000	0.310
HIGH	0.050	0.940	0.110	5.875	0.790	0.055	0.750	0.470	5.63	0.310	0.000	0.190	0.310	0.000	0.720

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

SPOT LEIOSTOMUS XANTHURUS 045020 AREA- NORTH ATLANTIC SITE- N1 MUSCLE

LENGTH NUM 1 MEAN 0.190 S. D. 0.000 LOW 0.190 HIGH 0.190
WEIGHT NUM 1 MEAN 0.106 S. D. 0.000 LOW 0.106 HIGH 0.106

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.020	0.565	0.055	2.875	1.310	0.045	0.100	0.380	6.03	0.215	0.000	0.250	0.400	0.535	0.560
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.565	0.055	2.875	1.310	0.045	0.100	0.380	6.03	0.215	0.000	0.250	0.400	0.535	0.560

SPOT LEIOSTOMUS XANTHURUS 045020 AREA- NORTH ATLANTIC SITE- N7 MUSCLE

LENGTH NUM 4 MEAN 0.153 S. D. 0.008 LOW 0.145 HIGH 0.163
WEIGHT NUM 4 MEAN 0.062 S. D. 0.012 LOW 0.050 HIGH 0.075

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0004	0000	0003	0000
MEAN	0.050	0.510	0.080	1.983	0.560	0.041	0.353	0.438	5.08	0.256	0.220	0.000	0.376	0.310	0.539
S. D.	0.000	0.202	0.016	0.806	0.229	0.013	0.162	0.114	0.20	0.046	0.127	0.000	0.075	0.000	0.047
LOW	0.000	0.370	0.060	0.870	0.310	0.030	0.190	0.310	4.84	0.200	0.130	0.000	0.295	0.000	0.500
HIGH	0.050	0.810	0.100	2.750	0.840	0.060	0.565	0.570	5.28	0.310	0.310	0.000	0.450	0.310	0.595

SPOT LEIOSTOMUS XANTHURUS 045020 AREA- NORTH ATLANTIC SITE- R6 MUSCLE

LENGTH NUM 7 MEAN 0.163 S. D. 0.007 LOW 0.156 HIGH 0.173
WEIGHT NUM 7 MEAN 0.076 S. D. 0.008 LOW 0.065 HIGH 0.091

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0007	0000	0000	0000
MEAN	0.055	0.362	0.079	2.409	0.549	0.039	0.161	0.669	4.99	0.267	0.250	0.000	0.297	0.646	0.619
S. D.	0.057	0.089	0.022	1.234	0.263	0.006	0.080	0.403	1.43	0.090	0.000	0.000	0.082	0.206	0.130
LOW	0.020	0.250	0.055	0.530	0.100	0.030	0.060	0.285	3.00	0.130	0.000	0.000	0.190	0.405	0.440
HIGH	0.140	0.500	0.120	3.550	0.850	0.050	0.310	1.440	6.31	0.430	0.250	0.000	0.410	0.860	0.810

SPOT LEIOSTOMUS XANTHURUS 045020 AREA- NORTH ATLANTIC SITE- R8 MUSCLE

LENGTH NUM 10 MEAN 0.150 S. D. 0.000 LOW 0.150 HIGH 0.150
WEIGHT NUM 10 MEAN 0.084 S. D. 0.000 LOW 0.084 HIGH 0.084

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0008	0000	0004	0000	0000	0005	0000	0000	0000	0003	0008	0008	0001	0002	0000
MEAN	0.089	0.609	0.076	2.606	0.726	0.044	0.227	0.303	4.45	0.281	0.500	0.285	0.373	1.190	0.562
S. D.	0.030	0.168	0.041	1.074	0.229	0.009	0.134	0.071	0.81	0.127	0.523	0.120	0.104	0.460	0.206
LOW	0.067	0.370	0.040	0.500	0.410	0.040	0.040	0.180	3.21	0.160	0.130	0.200	0.220	0.450	0.350
HIGH	0.110	0.890	0.150	4.060	1.200	0.060	0.490	0.410	5.93	0.545	0.870	0.370	0.555	1.930	0.925

SPOT LEIOSTOMUS XANTHURUS 045020 AREA- NORTH ATLANTIC SITE- R9 MUSCLE

LENGTH NUM 7 MEAN 0.190 S. D. 0.008 LOW 0.178 HIGH 0.202
WEIGHT NUM 7 MEAN 0.109 S. D. 0.012 LOW 0.093 HIGH 0.127

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0002	0000	0000	0000	0000	0001	0000	0000	0000	0000	0004	0006	0000	0000	0000
MEAN	0.074	1.026	0.064	3.723	0.578	0.037	0.131	0.432	5.18	0.211	0.157	0.250	0.334	0.675	0.511
S. D.	0.050	0.697	0.014	1.325	0.284	0.010	0.072	0.052	0.58	0.042	0.035	0.000	0.096	0.239	0.104
LOW	0.020	0.480	0.045	1.960	0.030	0.030	0.060	0.380	4.40	0.130	0.120	0.000	0.160	0.440	0.345
HIGH	0.150	2.390	0.090	5.806	0.890	0.055	0.250	0.510	6.11	0.250	0.190	0.250	0.470	1.000	0.660

SPOT LEIOSTOMUS XANTHURUS 045020 AREA- SOUTH ATLANTIC SITE- B8 MUSCLE

LENGTH NUM 10 MEAN 0.156 S. D. 0.000 LOW 0.156 HIGH 0.156
WEIGHT NUM 10 MEAN 0.170 S. D. 0.000 LOW 0.170 HIGH 0.170

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010
N DET.	0005	0001	0004	0000	0000	0004	0001	0000	0000	0003	0009	0010	0000	0003	0000
MEAN	0.032	0.541	0.095	6.708	0.542	0.040	0.205	0.473	5.27	0.437	0.220	0.000	0.277	0.807	0.425
S. D.	0.013	0.268	0.046	4.631	0.252	0.017	0.061	0.154	0.76	0.332	0.000	0.000	0.109	0.526	0.156
LOW	0.020	0.250	0.030	1.300	0.240	0.020	0.136	0.210	4.11	0.100	0.000	0.000	0.070	0.280	0.200
HIGH	0.050	1.050	0.150	16.720	1.030	0.070	0.315	0.670	6.43	1.000	0.220	0.000	0.395	1.830	0.780

SPOT LEIOSTOMUS XANTHURUS 045020 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH NUM 2 MEAN 0.182 S. D. 0.004 LOW 0.179 HIGH 0.185
WEIGHT NUM 2 MEAN 0.118 S. D. 0.007 LOW 0.113 HIGH 0.123

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0001	0000	0000	0001	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.020	0.238	0.070	6.800	0.793	0.040	0.110	0.520	6.10	0.500	0.000	0.200	0.413	1.670	0.445
S. D.	0.000	0.018	0.000	5.020	0.322	0.000	0.014	0.127	2.73	0.354	0.000	0.000	0.180	0.552	0.007
LOW	0.000	0.225	0.000	3.250	0.565	0.000	0.100	0.430	4.17	0.250	0.000	0.000	0.285	1.280	0.440
HIGH	0.020	0.250	0.070	10.350	1.020	0.040	0.120	0.610	8.03	0.750	0.000	0.200	0.540	2.060	0.450

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                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                  REPORT   MF17
                                       IN RESOURCE SURVEY SPECIES:
LOCATION LEVEL 5                       BY TISSUE AND LOCATION

 SPOT                              LEIOSTOMUS XANTHURUS                045020   AREA- SOUTH ATLANTIC       SITE- F3   MUSCLE

LENGTH      NUM    2   MEAN        0.188   S. D.      0.002   LOW      0.186   HIGH        0.189
WEIGHT      NUM    2   MEAN        0.104   S. D.      0.003   LOW      0.102   HIGH        0.106
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER      0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002
N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0000    0000    0000
MEAN       0.063   0.438   0.065   7.696   1.062   0.050   0.105   0.595    5.71   0.195   0.505   0.700   0.258   1.065   1.013
S. D.      0.004   0.088   0.007   2.834   0.196   0.028   0.021   0.078    0.56   0.021   0.219   0.000   0.032   0.262   0.774
LOW        0.060   0.375   0.060   5.692   0.923   0.030   0.090   0.540    5.31   0.180   0.350   0.000   0.235   0.880   0.465
HIGH       0.065   0.500   0.070   9.700   1.200   0.070   0.120   0.650    6.10   0.210   0.660   0.700   0.280   1.250   1.560

 SPOT                              LEIOSTOMUS XANTHURUS                045020   AREA- SOUTH ATLANTIC       SITE- F6   MUSCLE

LENGTH      NUM    2   MEAN        0.180   S. D.      0.001   LOW      0.179   HIGH        0.181
WEIGHT      NUM    2   MEAN        0.100   S. D.      0.004   LOW      0.097   HIGH        0.103
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER      0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002
N DET.      0000    0000    0001    0000    0000    0002    0000    0000    0000    0000    0002    0002    0000    0001    0000
MEAN       0.028   0.459   0.040  11.193   0.723   0.000   0.235   0.417    4.40   0.293   0.000   0.000   0.313   1.625   0.675
S. D.      0.003   0.303   0.000   1.348   0.202   0.000   0.057   0.080    0.34   0.095   0.000   0.000   0.146   0.000   0.530
LOW        0.026   0.245   0.000  10.240   0.580   0.000   0.195   0.360    4.16   0.226   0.000   0.000   0.210   0.000   0.300
HIGH       0.030   0.673   0.040  12.146   0.866   0.000   0.275   0.473    4.64   0.360   0.000   0.000   0.416   1.625   1.050

 SPOT                              LEIOSTOMUS XANTHURUS                045020   AREA- SOUTH ATLANTIC       SITE- G5   MUSCLE

LENGTH      NUM    2   MEAN        0.196   S. D.      0.001   LOW      0.195   HIGH        0.197
WEIGHT      NUM    2   MEAN        0.110   S. D.      0.001   LOW      0.109   HIGH        0.111
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER      0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002
N DET.      0000    0000    0001    0000    0000    0001    0000    0000    0000    0001    0001    0001    0000    0002    0000
MEAN       0.170   0.545   0.070   6.240   0.950   0.070   0.153   0.555    5.36   0.610   0.180   0.180   0.340   0.000   0.565
S. D.      0.014   0.163   0.000   5.657   0.028   0.000   0.004   0.332    0.50   0.000   0.000   0.000   0.127   0.000   0.191
LOW        0.160   0.430   0.000   2.240   0.930   0.000   0.150   0.320    5.00   0.000   0.000   0.000   0.250   0.000   0.430
HIGH       0.180   0.660   0.070  10.240   0.970   0.070   0.155   0.790    5.71   0.610   0.180   0.180   0.430   0.000   0.700

 KINGFISH, SOUTHERN                MENTICIRRHUS AMERICANUS             045021   AREA- GULF                 SITE- B7   MUSCLE

LENGTH      NUM    1   MEAN        0.193   S. D.      0.000   LOW      0.193   HIGH        0.193
WEIGHT      NUM    1   MEAN        0.121   S. D.      0.000   LOW      0.121   HIGH        0.121
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.      0001    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0001    0000    0000    0000
MEAN       0.000   0.440   0.110   1.675   0.980   0.040   0.500   0.370    5.18   0.300   0.000   0.000   0.160   1.060   0.560
S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH       0.000   0.440   0.110   1.675   0.980   0.040   0.500   0.370    5.18   0.300   0.000   0.000   0.160   1.060   0.560

 KINGFISH, SOUTHERN                MENTICIRRHUS AMERICANUS             045021   AREA- GULF                 SITE- D5   MUSCLE

LENGTH      NUM    1   MEAN        0.242   S. D.      0.000   LOW      0.242   HIGH        0.242
WEIGHT      NUM    1   MEAN        0.237   S. D.      0.000   LOW      0.237   HIGH        0.237
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER      0013    0013    0013    0013    0013    0013    0012    0012    0013    0013    0013    0013    0013    0013    0012
N DET.      0001    0000    0000    0000    0000    0002    0000    0000    0000    0000    0009    0011    0000    0000    0000
MEAN       0.085   0.533   0.054   3.994   1.091   0.034   0.177   0.398    4.27   0.192   0.225   0.215   0.133   0.708   0.546
S. D.      0.083   0.289   0.023   1.066   0.316   0.011   0.127   0.149    1.22   0.068   0.182   0.219   0.062   0.318   0.202
LOW        0.020   0.130   0.020   2.706   0.650   0.010   0.060   0.090    1.19   0.105   0.060   0.060   0.030   0.295   0.250
HIGH       0.330   0.970   0.090   6.650   1.530   0.050   0.440   0.560    5.32   0.325   0.470   0.370   0.285   1.440   0.910

 KINGFISH, SOUTHERN                MENTICIRRHUS AMERICANUS             045021   AREA- GULF                 SITE- D5   LIVER

LENGTH      NUM    0   MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH        0.000
WEIGHT      NUM    0   MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH        0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0000    0000    0000
MEAN       0.020   0.190   0.330   3.390   1.060   0.010   0.120   2.500   20.00   0.290   0.160   0.000   1.080   0.500   0.660
S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH       0.020   0.190   0.330   3.390   1.060   0.010   0.120   2.500   20.00   0.290   0.160   0.000   1.080   0.500   0.560

 KINGFISH, NORTHERN                MENTICIRRHUS SAXATILIS              045024   AREA- NORTH ATLANTIC       SITE- R9   MUSCLE

LENGTH      NUM    6   MEAN        0.204   S. D.      0.028   LOW      0.167   HIGH        0.245
WEIGHT      NUM    6   MEAN        0.095   S. D.      0.043   LOW      0.047   HIGH        0.167
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER      0005    0006    0006    0006    0006    0006    0006    0006    0006    0006    0006    0006    0006    0006    0005
N DET.      0003    0000    0000    0000    0000    0001    0000    0000    0000    0000    0006    0005    0000    0000    0000
MEAN       0.080   0.370   0.061   4.977   0.632   0.039   0.093   0.270    5.92   0.133   0.000   0.310   0.238   0.610   0.589
S. D.      0.085   0.104   0.016   1.195   0.164   0.002   0.037   0.086    0.68   0.033   0.000   0.000   0.090   0.080   0.170
LOW        0.020   0.250   0.035   3.766   0.400   0.035   0.060   0.110    5.31   0.090   0.000   0.000   0.110   0.530   0.440
HIGH       0.140   0.500   0.080   6.440   0.830   0.040   0.130   0.330    7.15   0.165   0.000   0.310   0.360   0.750   0.880
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

CROAKER, ATL. MICROPOGON UNDULATUS 045026 AREA- NORTH ATLANTIC SITE- N8 MUSCLE

LENGTH NUM 1 MEAN 0.244 S. D. 0.000 LOW 0.244 HIGH 0.244
WEIGHT NUM 1 MEAN 0.206 S. D. 0.000 LOW 0.206 HIGH 0.206

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.020	0.310	0.060	1.350	0.000	0.020	0.130	0.630	3.75	0.310	0.000	0.000	0.230	0.000	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.300	0.000	0.000	0.000	0.000
HIGH	0.020	0.310	0.060	1.350	0.000	0.020	0.130	0.630	3.75	0.310	0.000	0.000	0.230	0.000	0.380

CROAKER, ATL. MICROPOGON UNDULATUS 045026 AREA- NORTH ATLANTIC SITE- O4 MUSCLE

LENGTH NUM 3 MEAN 0.163 S. D. 0.045 LOW 0.114 HIGH 0.203
WEIGHT NUM 3 MEAN 0.084 S. D. 0.041 LOW 0.041 HIGH 0.123

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.048	0.450	0.070	5.393	1.008	0.048	0.197	0.593	3.93	0.312	0.250	0.265	0.345	0.857	0.715
S. D.	0.041	0.131	0.020	0.520	0.744	0.013	0.012	0.078	1.12	0.033	0.269	0.247	0.217	0.216	0.043
LOW	0.020	0.310	0.050	5.025	0.340	0.035	0.190	0.520	3.19	0.280	0.060	0.090	0.210	0.630	0.690
HIGH	0.095	0.570	0.090	5.760	1.810	0.060	0.210	0.675	5.22	0.345	0.440	0.440	0.595	1.060	0.765

CROAKER, ATL. MICROPOGON UNDULATUS 045026 AREA- NORTH ATLANTIC SITE- R3 MUSCLE

LENGTH NUM 10 MEAN 0.241 S. D. 0.012 LOW 0.224 HIGH 0.257
WEIGHT NUM 10 MEAN 0.217 S. D. 0.012 LOW 0.199 HIGH 0.238

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010
N DET.	0006	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0009	0000	0010	0000
MEAN	0.033	0.430	0.067	2.343	0.633	0.034	0.214	0.364	4.02	0.240	0.080	0.130	0.261	0.000	0.504
S. D.	0.015	0.109	0.018	1.207	0.276	0.009	0.139	0.056	0.40	0.063	0.000	0.000	0.063	0.000	0.146
LOW	0.020	0.310	0.030	0.100	0.020	0.020	0.060	0.295	3.44	0.120	0.000	0.000	0.170	0.000	0.380
HIGH	0.050	0.630	0.100	4.000	1.025	0.050	0.500	0.490	4.65	0.330	0.080	0.130	0.370	0.000	0.880

CROAKER, ATL. MICROPOGON UNDULATUS 045026 AREA- NORTH ATLANTIC SITE- R6 MUSCLE

LENGTH NUM 9 MEAN 0.247 S. D. 0.014 LOW 0.228 HIGH 0.272
WEIGHT NUM 9 MEAN 0.209 S. D. 0.029 LOW 0.175 HIGH 0.267

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0008	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0007	0008	0000	0004	0000
MEAN	0.083	0.391	0.100	1.382	0.486	0.044	0.162	0.741	3.72	0.276	0.100	0.750	0.294	0.556	0.658
S. D.	0.061	0.099	0.064	0.458	0.235	0.009	0.084	0.287	1.01	0.113	0.057	0.000	0.168	0.261	0.282
LOW	0.020	0.250	0.010	0.840	0.120	0.030	0.030	0.380	1.81	0.090	0.060	0.000	0.145	0.190	0.285
HIGH	0.220	0.500	0.210	2.133	0.745	0.060	0.250	1.190	5.06	0.450	0.140	0.750	0.530	0.810	1.220

CROAKER, ATL. MICROPOGON UNDULATUS 045026 AREA- NORTH ATLANTIC SITE- S7 MUSCLE

LENGTH NUM 5 MEAN 0.200 S. D. 0.078 LOW 0.114 HIGH 0.263
WEIGHT NUM 5 MEAN 0.155 S. D. 0.105 LOW 0.041 HIGH 0.254

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0001	0000	0000	0000	0001	0001	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.130	0.551	0.118	4.424	0.716	0.049	0.159	0.419	4.02	0.308	0.303	0.290	0.413	1.053	0.789
S. D.	0.028	0.289	0.108	2.340	0.276	0.009	0.091	0.286	0.94	0.074	0.211	0.221	0.196	0.638	0.217
LOW	0.090	0.293	0.055	2.215	0.365	0.040	0.075	0.060	2.85	0.220	0.060	0.060	0.165	0.250	0.525
HIGH	0.155	0.940	0.310	8.000	1.040	0.060	0.310	0.810	5.40	0.415	0.440	0.500	0.690	1.810	1.015

CROAKER, ATL. MICROPOGON UNDULATUS 045026 AREA- NORTH ATLANTIC SITE- S8 MUSCLE

LENGTH NUM 9 MEAN 0.233 S. D. 0.016 LOW 0.210 HIGH 0.254
WEIGHT NUM 9 MEAN 0.143 S. D. 0.028 LOW 0.101 HIGH 0.179

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0007	0003	0000	0000	0000
MEAN	0.134	0.853	0.071	5.192	0.722	0.054	0.197	0.436	4.70	0.229	0.120	0.267	0.324	0.783	0.583
S. D.	0.059	0.363	0.013	1.175	0.123	0.015	0.082	0.066	0.35	0.061	0.000	0.092	0.084	0.215	0.150
LOW	0.030	0.570	0.050	3.550	0.450	0.040	0.120	0.375	4.27	0.140	0.120	0.190	0.200	0.560	0.380
HIGH	0.220	1.710	0.090	7.750	0.840	0.080	0.380	0.580	5.30	0.295	0.120	0.440	0.500	1.130	0.815

CROAKER, ATL. MICROPOGON UNDULATUS 045026 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH NUM 2 MEAN 0.242 S. D. 0.006 LOW 0.237 HIGH 0.246
WEIGHT NUM 2 MEAN 0.170 S. D. 0.016 LOW 0.159 HIGH 0.181

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0011	0011	0012	0012	0012	0012	0012	0011	0011	0012	0012	0011
N DET.	0004	0002	0004	0000	0000	0008	0002	0000	0000	0004	0009	0008	0000	0003	0000
MEAN	0.061	0.473	0.075	2.332	0.726	0.040	0.182	0.373	4.70	0.316	0.185	0.177	0.487	0.921	0.503
S. D.	0.051	0.131	0.061	1.352	0.211	0.024	0.058	0.220	1.05	0.245	0.233	0.090	0.277	0.620	0.177
LOW	0.010	0.266	0.010	0.400	0.380	0.010	0.090	0.160	3.20	0.085	0.020	0.120	0.210	0.295	0.200
HIGH	0.150	0.635	0.180	5.050	1.095	0.070	0.290	0.860	7.14	0.855	0.350	0.280	1.000	2.280	0.750

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                                                              TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                      REPORT   MF17
                                                              IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                                              BY TISSUE AND LOCATION

ROAKER, ATL.                         MICROPOGON UNDULATUS                 045026   AREA- SOUTH ATLANTIC       SITE- F6   MUSCLE

NGTH      NUM    2   MEAN       0.168   S. D.      0.000   LOW      0.168   HIGH       0.168
IGHT      NUM    2   MEAN       0.072   S. D.      0.000   LOW      0.072   HIGH       0.072
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM

MBER       0002    0002    0002    0002    0002    0002    0002    0002    0002    0002     0002    0002    0002    0002    0002
DET.       0001    0000    0000    0000    0000    0001    0000    0000    0000    0000     0001    0002    0000    0000    0000
AN        0.030   0.555   0.115   9.040   0.710   0.070   0.383   0.310    5.09   0.170    1.310   0.000   0.665   0.998   0.813
S. D.     0.000   0.325   0.092   0.820   0.127   0.000   0.180   0.212    0.88   0.085    0.000   0.000   0.177   0.774   0.442
LOW       0.000   0.325   0.050   8.460   0.620   0.000   0.255   0.160    4.47   0.110    0.000   0.000   0.540   0.450   0.500
HIGH      0.030   0.785   0.180   9.620   0.800   0.070   0.510   0.460    5.71   0.230    1.310   0.000   0.790   1.545   1.125

ROAKER, ATL.                         MICROPOGON UNDULATUS                 045026   AREA- GULF                 SITE- B7   MUSCLE

LENGTH    NUM    8   MEAN       0.203   S. D.      0.067   LOW      0.155   HIGH       0.302
WEIGHT    NUM    7   MEAN       0.141   S. D.      0.118   LOW      0.056   HIGH       0.355
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM

MBER       0009    0009    0009    0009    0009    0009    0008    0009    0008    0009     0009    0009    0009    0009    0008
DET.       0006    0000    0000    0000    0000    0000    0000    0000    0000    0000     0007    0007    0000    0000    0000
MEAN      0.090   0.689   0.097   3.307   0.865   0.037   0.141   0.262    4.45   0.208    0.190   0.248   0.342   0.826   0.611
S. D.     0.044   0.466   0.024   1.701   0.283   0.005   0.076   0.080    0.86   0.083    0.085   0.004   0.185   0.343   0.198
LOW       0.040   0.190   0.060   0.500   0.380   0.030   0.060   0.130    3.06   0.060    0.130   0.245   0.160   0.160   0.380
GH        0.120   1.660   0.130   6.250   1.360   0.040   0.250   0.360    6.16   0.340    0.250   0.250   0.705   1.250   0.875

CROAKER, ATL.                        MICROPOGON UNDULATUS                 045026   AREA- GULF                 SITE- C9   MUSCLE

LENGTH    NUM   10   MEAN       0.350   S. D.      0.000   LOW      0.350   HIGH       0.350
IGHT      NUM   10   MEAN       0.795   S. D.      0.000   LOW      0.795   HIGH       0.795
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM

NUMBER     0010    0010    0010    0010    0010    0010    0009    0010    0010    0010     0010    0010    0010    0010    0009
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000     0009    0009    0000    0003    0000
MEAN      0.135   0.365   0.077   1.746   0.661   0.039   0.147   0.380    3.21   0.236    0.060   0.060   0.142   0.539   0.568
 D.       0.043   0.106   0.024   1.070   0.276   0.008   0.061   0.091    0.74   0.091    0.000   0.000   0.072   0.194   0.153
DW        0.070   0.250   0.050   0.360   0.120   0.025   0.060   0.250    1.88   0.080    0.000   0.000   0.090   0.310   0.380
GH        0.210   0.560   0.130   3.600   1.140   0.050   0.250   0.530    4.88   0.360    0.060   0.060   0.340   0.810   0.810

CROAKER, ATL.                        MICROPOGON UNDULATUS                 045026   AREA- GULF                 SITE- E5   MUSCLE

ENGTH     NUM   10   MEAN       0.314   S. D.      0.016   LOW      0.291   HIGH       0.342
EIGHT     NUM   10   MEAN       0.425   S. D.      0.068   LOW      0.322   HIGH       0.540
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM

NUMBER     0010    0010    0010    0010    0010    0010    0010    0010    0010    0010     0010    0010    0010    0009    0009
N DET.     0003    0000    0002    0000    0000    0006    0000    0000    0000    0002     0005    0008    0001    0003    0000
EAN       0.027   0.378   0.087   3.256   0.904   0.040   0.151   0.412    4.16   0.230    0.146   0.215   0.176   0.621   0.514
 D.       0.014   0.154   0.049   1.509   0.177   0.008   0.081   0.099    0.93   0.147    0.130   0.092   0.085   0.217   0.125
DW        0.010   0.216   0.040   0.975   0.586   0.030   0.040   0.250    2.50   0.085    0.060   0.150   0.080   0.400   0.350
HIGH      0.050   0.750   0.180   6.900   1.170   0.050   0.290   0.540    6.03   0.530    0.370   0.280   0.320   1.000   0.735

CROAKER, ATL.                        MICROPOGON UNDULATUS                 045026   AREA- GULF                 SITE- E8   MUSCLE

ENGTH     NUM   10   MEAN       0.316   S. D.      0.010   LOW      0.297   HIGH       0.332
EIGHT     NUM   10   MEAN       0.449   S. D.      0.044   LOW      0.382   HIGH       0.511
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM

UMBER      0010    0010    0010    0010    0010    0010    0010    0010    0010    0009     0010    0010    0010    0010    0009
 DET.      0009    0000    0000    0000    0000    0000    0000    0000    0000    0000     0009    0008    0000    0000    0000
EAN       0.020   0.445   0.093   3.687   1.092   0.032   0.233   0.421    4.29   0.177    0.190   0.430   0.136   0.581   0.480
. D.      0.000   0.176   0.079   1.502   0.296   0.009   0.165   0.132    0.79   0.029    0.000   0.071   0.031   0.143   0.086
LOW       0.000   0.190   0.040   1.400   0.510   0.020   0.070   0.180    3.00   0.140    0.000   0.380   0.100   0.310   0.310
HIGH      0.020   0.750   0.310   6.500   1.485   0.050   0.560   0.590    6.06   0.240    0.190   0.480   0.210   0.850   0.630

CROAKER, ATL.                        MICROPOGON UNDULATUS                 045026   AREA- GULF                 SITE- G5   MUSCLE

ENGTH     NUM    2   MEAN       0.385   S. D.      0.007   LOW      0.380   HIGH       0.390
WEIGHT    NUM    2   MEAN       0.908   S. D.      0.000   LOW      0.908   HIGH       0.908
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM

UMBER      0002    0002    0002    0002    0002    0002    0002    0002    0002    0002     0002    0002    0002    0002    0002
 DET.      0001    0000    0000    0000    0000    0000    0000    0000    0000    0000     0002    0002    0000    0002    0000
MEAN      0.035   0.565   0.060   2.891   0.958   0.040   0.118   0.378    3.64   0.235    0.000   0.000   0.178   0.000   0.408
S. D.     0.000   0.269   0.014   0.530   0.152   0.014   0.018   0.074    0.11   0.057    0.000   0.000   0.053   0.000   0.018
LOW       0.000   0.375   0.050   2.516   0.850   0.030   0.105   0.325    3.56   0.195    0.000   0.000   0.140   0.000   0.395
IGH       0.035   0.755   0.070   3.266   1.065   0.050   0.130   0.430    3.72   0.275    0.000   0.000   0.215   0.000   0.420

DRUM, BLACK                          POGONIAS CROMIS                      045028   AREA- GULF                 SITE- B8   MUSCLE

LENGTH    NUM    1   MEAN       0.315   S. D.      0.000   LOW      0.315   HIGH       0.315
WEIGHT    NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001     0001    0001    0001    0001    0001
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000     0001    0001    0000    0000    0000
MEA       0.020   0.500   0.110   2.900   1.045   0.030   0.130   0.330    4.75   0.240    0.000   0.000   0.120   0.940   0.310
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000   0.000
OW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000   0.000
HIGH      0.020   0.500   0.110   2.900   1.045   0.030   0.130   0.330    4.75   0.240    0.000   0.000   0.120   0.940   0.310
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

DRUM, BLACK POGONIAS CROMIS 045028 AREA- GULF SITE- D5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	00
N DET.	0007	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0010	0000	0000	00
MEAN	0.070	0.426	0.066	2.475	0.724	0.029	0.296	0.305	4.04	0.192	0.220	0.000	0.257	0.635	0.4
S. D.	0.030	0.267	0.018	0.763	0.265	0.009	0.235	0.092	0.69	0.077	0.000	0.000	0.102	0.234	0.0
LOW	0.040	0.130	0.040	1.600	0.415	0.010	0.040	0.230	3.37	0.060	0.000	0.000	0.140	0.380	0.380
HIGH	0.100	1.095	0.100	4.000	1.210	0.040	0.810	0.520	5.63	0.350	0.220	0.000	0.430	1.190	0.520

DRUM, BLACK POGONIAS CROMIS 045028 AREA- GULF SITE- E5 MUSCLE

LENGTH NUM 10 MEAN 0.463 S. D. 0.146 LOW 0.360 HIGH 0.850
WEIGHT NUM 10 MEAN 1.746 S. D. 2.062 LOW 0.690 HIGH 7.500

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0008	0010	0009	0009	0010	0010	0010	0010	0010	0009	0010	0010	0010	00
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0009	0010	0000	0000	00
MEAN	0.140	0.714	0.092	4.077	0.750	0.029	0.289	0.282	3.96	0.191	0.000	0.000	0.116	0.751	0.44
S. D.	0.183	0.740	0.051	2.480	0.328	0.005	0.159	0.062	0.59	0.061	0.000	0.000	0.030	0.238	0.136
LOW	0.040	0.310	0.040	1.250	0.360	0.020	0.130	0.140	2.63	0.110	0.000	0.000	0.080	0.380	0.190
HIGH	0.650	2.500	0.210	10.000	1.250	0.040	0.630	0.350	4.75	0.290	0.000	0.000	0.170	1.090	0.5

DRUM, BLACK POGONIAS CROMIS 045028 AREA- GULF SITE- F7 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	000
N DET.	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000	0001	0004	0000	0001	0000
MEAN	0.163	0.381	0.049	6.090	0.468	0.032	0.174	0.217	4.14	0.230	0.283	0.433	0.123	0.953	0.441
S. D.	0.069	0.178	0.021	2.911	0.161	0.006	0.103	0.089	1.24	0.095	0.254	0.323	0.037	0.132	0.094
LOW	0.050	0.220	0.010	2.332	0.295	0.025	0.077	0.100	2.06	0.060	0.060	0.060	0.070	0.780	0.3
HIGH	0.260	0.690	0.070	10.150	0.683	0.040	0.310	0.350	6.32	0.360	0.720	0.620	0.180	1.150	0.6

DRUM, BLACK POGONIAS CROMIS 045028 AREA- GULF SITE- F7 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.120	0.810	0.440	4.200	1.740	0.040	0.190	31.250	25.00	0.160	0.160	0.000	1.250	1.000	0.38
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.120	0.810	0.440	4.200	1.740	0.040	0.190	31.250	25.00	0.160	0.160	0.000	1.250	1.000	0.38

DRUM, BLACK POGONIAS CROMIS 045028 AREA- GULF SITE- G3 MUSCLE

LENGTH NUM 10 MEAN 0.501 S. D. 0.057 LOW 0.385 HIGH 0.570
WEIGHT NUM 10 MEAN 1.990 S. D. 0.579 LOW 1.134 HIGH 2.835

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0001	0005	0000	0000	0006	0000	0001	0000	0002	0009	0008	0001	0004	000
MEAN	0.096	0.617	0.055	2.625	1.164	0.031	0.202	0.232	4.31	0.193	0.150	0.258	0.115	0.588	0.57
S. D.	0.033	0.144	0.017	1.641	0.250	0.012	0.125	0.155	1.54	0.110	0.000	0.152	0.035	0.236	0.20
LOW	0.050	0.350	0.035	0.860	0.690	0.015	0.073	0.070	2.14	0.110	0.000	0.150	0.070	0.360	0.31
HIGH	0.140	0.820	0.070	5.500	1.520	0.040	0.500	0.570	7.50	0.430	0.150	0.365	0.180	1.000	1.000

DRUM, BLACK POGONIAS CROMIS 045028 AREA- GULF SITE- G5 MUSCLE

LENGTH NUM 5 MEAN 0.534 S. D. 0.156 LOW 0.350 HIGH 0.770
WEIGHT NUM 5 MEAN 3.059 S. D. 2.293 LOW 0.795 HIGH 6.895

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	000
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0005	0005	0000	0004	000
MEAN	0.103	0.437	0.065	4.857	1.235	0.029	0.114	0.253	3.48	0.271	0.000	0.000	0.154	0.060	0.58
S. D.	0.050	0.236	0.005	2.480	0.223	0.004	0.052	0.119	0.58	0.036	0.000	0.000	0.038	0.000	0.111
LOW	0.050	0.190	0.060	0.895	0.990	0.025	0.075	0.090	2.72	0.220	0.000	0.000	0.090	0.000	0.440
HIGH	0.180	0.805	0.070	7.375	1.510	0.035	0.190	0.390	4.28	0.310	0.000	0.000	0.190	0.060	0.735

DRUM, BLACK POGONIAS CROMIS 045028 AREA- GULF SITE- L2 MUSCLE

LENGTH NUM 1 MEAN 0.252 S. D. 0.000 LOW 0.252 HIGH 0.252
WEIGHT NUM 1 MEAN 0.415 S. D. 0.000 LOW 0.415 HIGH 0.415

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	000
MEAN	0.000	1.212	0.025	2.070	0.245	0.040	0.643	0.626	6.60	0.180	0.060	0.630	0.206	1.586	1.625
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.000	1.212	0.025	2.070	0.245	0.040	0.643	0.626	6.60	0.180	0.060	0.630	0.206	1.586	1.62

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                                              TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                    REPORT    MF17
                                              IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                              BY TISSUE AND LOCATION

 M, BLACK                           POGONIAS CROMIS                           045028    AREA- GULF                    SITE- L5    MUSCLE

 TH         NUM    7    MEAN         0.427    S. D.      0.071    LOW        0.362    HIGH          0.539
 HT         NUM    7    MEAN         2.051    S. D.      1.276    LOW        0.232    HIGH          4.102
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL      MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM         PPM     PPM     PPM     PPM       PPM

 ER         0007     0007    0007    0007    0007    0007     0007     0007    0007    0007        0007    0007    0007    0007      0007
 T.         0000     0000    0002    0000    0000    0002     0001     0000    0000    0000        0002    0006    0001    0001      0000
           0.068    0.392   0.069  12.459   0.606   0.036    0.199    0.292    5.12   0.256       0.340   0.120   0.127   0.672     0.557
           0.055    0.258   0.018   5.912   0.236   0.023    0.103    0.081    1.14   0.171       0.260   0.000   0.073   0.373     0.170
OW         0.020    0.160   0.050   0.533   0.250   0.010    0.090    0.185    3.25   0.020       0.110   0.000   0.045   0.130     0.380
IGH        0.160    0.825   0.090  17.750   0.955   0.070    0.365    0.425    7.14   0.540       0.720   0.120   0.250   1.060     0.810

 M, BLACK                           POGONIAS CROMIS                           045028    AREA- GULF                    SITE- L5    LIVER

ENGTH       NUM    1    MEAN         0.397    S. D.      0.000    LOW        0.397    HIGH          0.397
EIGHT       NUM    1    MEAN         1.904    S. D.      0.000    LOW        1.904    HIGH          1.904
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL      MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM         PPM     PPM     PPM     PPM       PPM

 BER        0001     0001    0001    0001    0001    0001     0001     0001    0001    0001        0001    0001    0001    0001      0001
 ET.        0000     0000    0000    0000    0000    0000     0000     0000    0000    0000        0000    0000    0000    0000      0000
EAN        0.050    0.130   0.400   4.825   1.375   0.080    0.140    4.830   26.05   0.300       0.050   0.210   0.640   1.650     0.650
. D.       0.000    0.000   0.000   0.000   0.000   0.000    0.000    0.000    0.00   0.000       0.000   0.000   0.000   0.000     0.000
OW         0.000    0.000   0.000   0.000   0.000   0.000    0.000    0.000    0.00   0.000       0.000   0.000   0.000   0.000     0.000
  H        0.050    0.130   0.400   4.825   1.375   0.080    0.140    4.830   26.05   0.300       0.050   0.210   0.640   1.650     0.650

 UM, BLACK                          POGONIAS CROMIS                           045028    AREA- GULF                    SITE- L8    MUSCLE

ENGTH       NUM    0    MEAN         0.000    S. D.      0.000    LOW        0.000    HIGH          0.000
EIGHT       NUM    0    MEAN         0.000    S. D.      0.000    LOW        0.000    HIGH          0.000
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL      MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM         PPM     PPM     PPM     PPM       PPM

UMBER       0010     0010    0010    0010    0010    0010     0010     0010    0010    0010        0010    0010    0010    0010      0009
 DET.       0000     0000    0000    0000    0000    0000     0000     0000    0000    0000        0009    0010    0000    0000      0000
EAN        0.096    0.458   0.073   3.790   0.652   0.032    0.224    0.336    3.76   0.189       0.120   0.000   0.131   0.647     0.499
  D.       0.035    0.190   0.025   1.654   0.509   0.007    0.111    0.165    1.30   0.065       0.000   0.000   0.047   0.217     0.085
           0.040    0.190   0.040   0.600   0.265   0.020    0.110    0.150    1.88   0.110       0.000   0.000   0.080   0.310     0.405
  H        0.170    0.750   0.120   6.500   2.025   0.040    0.380    0.690    5.87   0.340       0.120   0.000   0.210   0.940     0.690

DRUM, RED                           SCIAENOPS OCELLATA                        045030    AREA- NORTH ATLANTIC         SITE- R9    MUSCLE

 GTH        NUM   10    MEAN         0.354    S. D.      0.000    LOW        0.354    HIGH          0.354
 GHT        NUM   10    MEAN         0.590    S. D.      0.000    LOW        0.590    HIGH          0.590
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL      MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM         PPM     PPM     PPM     PPM       PPM

UMBER       0010     0010    0010    0010    0010    0010     0010     0010    0010    0010        0010    0010    0010    0010      0010
 DET.       0000     0002    0002    0000    0000    0005     0001     0000    0000    0001        0008    0008    0000    0003      0000
  N        0.066    0.479   0.063   2.462   0.585   0.033    0.177    0.303    4.32   0.233       0.785   0.130   0.226   0.587     0.484
  D.       0.023    0.254   0.019   1.972   0.310   0.018    0.081    0.089    0.93   0.100       0.092   0.099   0.120   0.234     0.088
           0.030    0.060   0.030   0.150   0.040   0.010    0.096    0.165    2.06   0.040       0.720   0.060   0.040   0.400     0.350
  H        0.100    0.946   0.085   6.000   0.980   0.055    0.293    0.500    5.65   0.370       0.850   0.200   0.430   1.000     0.630

DRUM, RED                           SCIAENOPS OCELLATA                        045030    AREA- SOUTH ATLANTIC         SITE- C2    MUSCLE

 GTH        NUM   10    MEAN         0.441    S. D.      0.082    LOW        0.360    HIGH          0.580
 GHT        NUM   10    MEAN         1.166    S. D.      0.562    LOW        0.720    HIGH          2.180
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL      MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM         PPM     PPM     PPM     PPM       PPM

 MBER       0009     0010    0010    0010    0010    0010     0010     0010    0010    0010        0010    0010    0010    0010      0009
 DET.       0001     0000    0000    0000    0000    0003     0000     0000    0000    0000        0010    0009    0000    0000      0000
 AN        0.085    0.321   0.065   6.771   0.521   0.031    0.120    0.264    4.26   0.160       0.000   0.470   0.198   0.600     0.902
  D.       0.069    0.112   0.016   4.274   0.103   0.011    0.050    0.050    0.67   0.055       0.000   0.000   0.089   0.199     1.085
OW         0.030    0.190   0.040   1.900   0.380   0.010    0.060    0.160    2.75   0.080       0.000   0.000   0.060   0.160     0.310
IGH        0.220    0.560   0.090  14.500   0.700   0.040    0.190    0.320    5.44   0.245       0.000   0.470   0.350   0.940     3.760

RUM, RED                            SCIAENOPS OCELLATA                        045030    AREA- SOUTH ATLANTIC         SITE- C2    LIVER

 NGTH       NUM    1    MEAN         0.442    S. D.      0.000    LOW        0.442    HIGH          0.442
EIGHT       NUM    1    MEAN         1.166    S. D.      0.000    LOW        1.166    HIGH          1.166
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL      MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM         PPM     PPM     PPM     PPM       PPM

 MBER       0001     0001    0001    0001    0001    0001     0001     0001    0001    0001        0001    0001    0001    0001      0001
 DET.       0000     0000    0000    0000    0000    0000     0000     0000    0000    0000        0000    0001    0000    0000      0000
 AN        0.050    0.440   0.090   5.325   2.430   0.030    0.060    6.250   25.50   0.440       0.190   0.000   0.760   0.440     0.360
. D.       0.000    0.000   0.000   0.000   0.000   0.000    0.000    0.000    0.00   0.000       0.000   0.000   0.000   0.000     0.000
OW         0.000    0.000   0.000   0.000   0.000   0.000    0.000    0.000    0.00   0.000       0.000   0.000   0.000   0.000     0.000
 GH        0.050    0.440   0.090   5.325   2.430   0.030    0.060    6.250   25.50   0.440       0.190   0.000   0.760   0.440       360

RUM, RED                            SCIAENOPS OCELLATA                        045030    AREA- GULF                    SITE- B8    MUSCLE

ENGTH       NUM    2    MEAN         0.319    S. D.      0.001    LOW        0.318    HIGH          0.320
EIGHT       NUM    2    MEAN         0.624    S. D.      0.402    LOW        0.340    HIGH          0.908
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL      MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM         PPM     PPM     PPM     PPM       PPM

 MBER       0002     0002    0002    0002    0002    0002     0001     0002    0002    0002        0002    0002    0002    0002      0002
 DET.       0000     0000    0000    0000    0000    0000     0000     0000    0000    0000        0002    0002    0000    0000      0000
EAN        0.075    0.530   0.080   3.025   0.705   0.025    0.130    0.210    3.00   0.180       0.000   0.000   0.155   0.685     0.285
. D.       0.035    0.396   0.014   0.990   0.226   0.007    0.000    0.071    0.98   0.057       0.000   0.000   0.021   0.177     0.134
           0.050    0.250   0.070   2.325   0.545   0.020    0.000    0.160    2.31   0.140       0.000   0.000   0.140   0.560     0.190
IGH        0.100    0.810   0.090   3.725   0.865   0.030    0.130    0.260    3.69   0.220       0.000   0.000   0.170   0.810     0.380
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

DRUM, RED SCIAENOPS OCELLATA 045030 AREA- GULF SITE- C9 MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0007	0010	0010	0010	0010	0010	0010	0010	0
N DET.	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000	0010	0010	0000	0001	0
MEAN	0.413	0.406	0.083	4.168	0.610	0.020	0.162	0.314	3.69	0.142	0.000	0.000	0.095	0.587	0.
S. D.	0.241	0.189	0.042	2.362	0.168	0.012	0.101	0.037	0.73	0.065	0.000	0.000.	0.024	0.194	0.
LOW	0.150	0.130	0.040	1.750	0.300	0.010	0.060	0.250	1.88	0.070	0.000	0.000	0.050	0.310	0.030
HIGH	0.800	0.690	0.190	8.000	0.900	0.040	0.310	0.380	4.44	0.270	0.000	0.000	0.130	0.940	0.560

DRUM, RED SCIAENOPS OCELLATA 045030 AREA- GULF SITE- G3 MUSCLE

LENGTH	NUM	11	MEAN	0.615	S. D.	0.065	LOW	0.500	HIGH	0.710
WEIGHT	NUM	11	MEAN	2.758	S. D.	0.989	LOW	1.531	HIGH	4.763

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0012	0012	0012	0012	0012	0011	0012	0012	0012	0012	0
N DET.	0000	0000	0005	0001	0000	0006	0001	0001	0000	0001	0012	0009	0000	0003	0
MEAN	0.215	0.477	0.061	2.037	0.830	0.091	0.188	0.188	4.27	0.309	0.000	0.100	0.179	0.788	0.
S. D.	0.052	0.215	0.042	0.723	0.208	0.079	0.092	0.086	1.30	0.205	0.000	0.030	0.136	0.381	0.354
LOW	0.145	0.150	0.020	0.800	0.580	0.020	0.070	0.070	2.46	0.105	0.000	0.070	0.030	0.370	0.300
HIGH	0.310	0.740	0.140	2.800	1.245	0.190	0.330	0.320	6.71	0.680	0.000	0.130	0.540	1.500	1.

DRUM, RED SCIAENOPS OCELLATA 045030 AREA- GULF SITE- G3 LIVER

LENGTH	NUM	1	MEAN	0.627	S. D.	0.000	LOW	0.627	HIGH	0.627
WEIGHT	NUM	1	MEAN	2.880	S. D.	0.000	LOW	2.880	HIGH	2.880

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	00
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.240	0.630	2.260	1.400	1.880	0.010	0.150	12.690	15.75	0.370	0.310	0.000	1.080	0.870	0.590
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.
HIGH	0.240	0.630	2.260	1.400	1.880	0.010	0.150	12.690	15.75	0.370	0.310	0.000	1.080	0.870	0.5

DRUM, RED SCIAENOPS OCELLATA 045030 AREA- GULF SITE- G5 MUSCLE

LENGTH	NUM	6	MEAN	0.601	S. D.	0.025	LOW	0.560	HIGH	0.630
WEIGHT	NUM	6	MEAN	2.459	S. D.	0.371	LOW	1.929	HIGH	2.951

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0004	0000	0006	0000
MEAN	0.096	0.329	0.061	3.436	0.624	0.030	0.195	0.276	3.61	0.236	0.000	0.235	0.163	0.000	0.5
S. D.	0.038	0.143	0.009	1.202	0.262	0.009	0.101	0.110	0.25	0.025	0.000	0.064	0.033	0.000	0.0
LOW	0.050	0.130	0.050	2.050	0.210	0.020	0.095	0.150	3.13	0.210	0.000	0.190	0.120	0.000	0.3
HIGH	0.155	0.470	0.070	4.816	1.010	0.045	0.380	0.425	3.81	0.280	0.000	0.280	0.200	0.000	0.6

DRUM, RED SCIAENOPS OCELLATA 045030 AREA- GULF SITE- L5 MUSCLE

LENGTH	NUM	3	MEAN	0.254	S. D.	0.020	LOW	0.234	HIGH	0.273
WEIGHT	NUM	3	MEAN	0.213	S. D.	0.037	LOW	0.176	HIGH	0.250

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0003	0002	0000	0001	00
MEAN	0.108	0.517	0.065	4.985	0.687	0.035	0.226	0.242	4.75	0.393	0.000	1.130	0.302	1.678	0.8
S. D.	0.060	0.127	0.035	1.830	0.307	0.007	0.125	0.010	0.96	0.143	0.000	0.000	0.228	0.350	0.6
LOW	0.050	0.370	0.040	2.900	0.480	0.030	0.125	0.230	3.96	0.250	0.000	0.000	0.160	1.430	0.4
HIGH	0.170	0.590	0.090	6.325	1.040	0.040	0.366	0.250	5.82	0.535	0.000	1.130	0.565	1.925	1.600

DRUM, RED SCIAENOPS OCELLATA 045030 AREA- GULF SITE- L8 MUSCLE

LENGTH	NUM	8	MEAN	0.636	S. D.	0.054	LOW	0.570	HIGH	0.730
WEIGHT	NUM	8	MEAN	3.103	S. D.	0.774	LOW	2.140	HIGH	4.360

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0007	0007	0008	0008	0007	0008	0008	0008	0008	0008	0008	00
N DET.	0000	0000	0002	0000	0000	0005	0001	0000	0000	0001	0007	0006	0000	0004	00
MEAN	0.146	0.670	0.083	6.624	0.384	0.060	0.165	0.339	4.76	0.229	0.060	0.280	0.144	0.771	0.6
S. D.	0.093	0.487	0.025	3.653	0.188	0.026	0.045	0.157	0.54	0.090	0.000	0.311	0.066	0.271	0.44
LOW	0.020	0.190	0.060	3.300	0.175	0.030	0.110	0.040	3.93	0.070	0.000	0.060	0.080	0.500	0.350
HIGH	0.280	1.630	0.120	13.250	0.630	0.080	0.250	0.540	5.71	0.370	0.060	0.500	0.290	1.060	1.600

DRUM, RED SCIAENOPS OCELLATA 045030 AREA- GULF SITE- L8 LIVER

LENGTH	NUM	1	MEAN	0.636	S. D.	0.000	LOW	0.636	HIGH	0.636
WEIGHT	NUM	1	MEAN	3.103	S. D.	0.000	LOW	3.103	HIGH	3.103

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PP
NUMBER	0001	0001	0001	0000	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0001	0000	0000	000
MEAN	0.230	0.560	0.180	0.000	0.000	0.040	0.190	0.000	0.00	0.690	0.310	0.000	0.590	0.530	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.230	0.560	0.180	0.000	0.000	0.040	0.190	0.000	0.00	0.690	0.310	0.000	0.590	0.530	0.63

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                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                    REPORT   MF17
                                       IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                       BY TISSUE AND LOCATION

 RUM, RED                    SCIAENOPS OCELLATA                  045030   AREA- GULF                 SITE- L9   MUSCLE

 NGTH      NUM    0   MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH         0.000
 IGHT      NUM    0   MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH         0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM       PPM     PPM      PPM     PPM       PPM

 MBER      0012    0012    0012    0012    0012    0012    0012      0012    0012    0012      0012    0012     0012    0012      0010
 DET.      0000    0000    0000    0000    0000    0000    0000      0000    0000    0000      0006    0007     0000    0000      0000
 EAN      0.092   0.323   0.048   2.892   0.679   0.038   0.138     0.290    3.48   0.165     0.237   0.120    0.119   0.720     0.552
  D.      0.052   0.086   0.021   1.791   0.380   0.020   0.106     0.109    0.49   0.046     0.314   0.118    0.067   0.207     0.263
LOW       0.030   0.190   0.020   0.500   0.320   0.020   0.060     0.060    2.24   0.100     0.060   0.060    0.030   0.340     0.280
HIGH      0.200   0.465   0.105   6.093   1.600   0.080   0.440     0.430    4.01   0.280     0.870   0.330    0.260   1.060     1.040

 EEL, CONGER                 CONGER OCEANICUS                    047002   AREA- NORTH ATLANTIC       SITE- 02   MUSCLE

 ENGTH     NUM    1   MEAN        0.730   S. D.      0.000   LOW       0.730   HIGH         0.730
WEIGHT     NUM    1   MEAN        0.840   S. D.      0.000   LOW       0.840   HIGH         0.840
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM       PPM     PPM      PPM     PPM       PPM

 UMBER     0001    0001    0001    0001    0001    0001    0001      0001    0001    0001      0001    0001     0001    0001      0001
 DET.      0000    0000    0000    0000    0000    0000    0000      0000    0000    0000      0001    0001     0000    0001      0000
MEAN      0.035   0.255   0.055   8.833   0.625   0.030   0.190     0.235    6.41   0.165     0.000   0.000    0.225   0.000     0.365
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000     0.000    0.00   0.000     0.000   0.000    0.000   0.000     0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000     0.000    0.00   0.000     0.000   0.000    0.000   0.000     0.000
 IGH      0.035   0.255   0.055   8.833   0.625   0.030   0.190     0.235    6.41   0.165     0.000   0.000    0.225   0.000     0.365

 EEL, AMERICAN               ANGUILLA ROSTRATA                   051001   AREA- NORTH ATLANTIC       SITE- R5   MUSCLE

LENGTH     NUM   15   MEAN        0.520   S. D.      0.060   LOW       0.458   HIGH         0.646
WEIGHT     NUM   19   MEAN        0.276   S. D.      0.111   LOW       0.145   HIGH         0.541
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM       PPM     PPM      PPM     PPM       PPM

 UMBER     0020    0020    0020    0020    0020    0020    0020      0020    0020    0020      0020    0020     0020    0020      0018
N DET.     0000    0001    0004    0000    0000    0004    0001      0000    0000    0003      0017    0014     0000    0005      0000
MEAN      0.189   0.413   0.068   1.595   0.473   0.062   0.196     0.249   15.19   0.212     0.153   0.404    0.384   0.527     0.563
S. D.     0.096   0.341   0.038   0.913   0.448   0.114   0.145     0.087    4.93   0.092     0.188   0.236    0.186   0.316     0.196
 OW       0.020   0.120   0.010   0.150   0.060   0.010   0.060     0.105    4.50   0.060     0.030   0.150    0.160   0.250     0.300
 IGH      0.365   1.603   0.140   3.620   2.130   0.480   0.630     0.460   25.00   0.430     0.370   0.800    0.960   1.265     1.130

 EEL, AMERICAN               ANGUILLA ROSTRATA                   051001   AREA- NORTH ATLANTIC       SITE- R8   MUSCLE

 ENGTH     NUM   10   MEAN        0.590   S. D.      0.073   LOW       0.501   HIGH         0.740
 EIGHT     NUM   10   MEAN        0.517   S. D.      0.272   LOW       0.272   HIGH         1.170
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER     0010    0009    0010    0010    0010    0010    0009      0010    0010    0010      0010    0010     0010    0010      0010
N DET.     0000    0000    0000    0000    0000    0000    0001      0000    0000    0000      0010    0009     0000    0004      0000
 EAN      0.255   0.413   0.076   1.626   0.308   0.032   0.222     0.186   14.60   0.210     0.000   0.630    0.264   0.458     0.603
 . D.     0.194   0.239   0.036   1.131   0.157   0.007   0.126     0.087    2.26   0.066     0.000   0.000    0.110   0.226     0.241
 OW       0.040   0.190   0.040   0.450   0.060   0.020   0.090     0.060   10.97   0.080     0.000   0.000    0.165   0.060     0.380
 IGH      0.670   0.780   0.160   3.880   0.530   0.040   0.500     0.295   18.13   0.325     0.000   0.630    0.530   0.720     1.130

 POUT, OCEAN                 MACROZOARCES AMERICANUS             056018   AREA- NORTH ATLANTIC       SITE- I5   MUSCLE

 ENGTH     NUM    1   MEAN        0.463   S. D.      0.000   LOW       0.463   HIGH         0.463
 EIGHT     NUM    1   MEAN        0.471   S. D.      0.000   LOW       0.471   HIGH         0.471
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001      0001    0001    0001      0001    0001     0001    0001      0001
N DET.     0000    0000    0000    0000    0000    0000    0000      0000    0000    0000      0001    0001     0000    0000      0000
 EAN      0.020   0.345   0.060   2.440   0.300   0.045   0.155     0.290    8.75   0.225     0.000   0.000    0.205   0.470     0.565
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000     0.000    0.00   0.000     0.000   0.000    0.000   0.000     0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000     0.000    0.00   0.000     0.000   0.000    0.000   0.000     0.000
HIGH      0.020   0.345   0.060   2.440   0.300   0.045   0.155     0.290    8.75   0.225     0.000   0.000    0.205   0.470     0.565

 POUT, OCEAN                 MACROZOARCES AMERICANUS             056018   AREA- NORTH ATLANTIC       SITE- I7   MUSCLE

 ENGTH     NUM    1   MEAN        0.675   S. D.      0.000   LOW       0.675   HIGH         0.675
WEIGHT     NUM    0   MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH         0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001      0001    0001    0001      0001    0001     0001    0001      0000
N DET.     0001    0000    0000    0000    0000    0000    0000      0000    0000    0000      0001    0001     0000    0000      0000
MEAN      0.000   0.500   0.060   2.700   0.510   0.040   0.120     0.870    9.44   0.180     0.000   0.000    0.060   1.100     0.000
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000     0.000    0.00   0.000     0.000   0.000    0.000   0.000     0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000     0.000    0.00   0.000     0.000   0.000    0.000   0.000     0.000
HIGH      0.000   0.500   0.060   2.700   0.510   0.040   0.120     0.870    9.44   0.180     0.000   0.000    0.060   1.100     0.000

 POUT, OCEAN                 MACROZOARCES AMERICANUS             056018   AREA- NORTH ATLANTIC       SITE- I7   LIVER

LENGTH     NUM    1   MEAN        0.675   S. D.      0.000   LOW       0.675   HIGH         0.675
WEIGHT     NUM    1   MEAN        0.587   S. D.      0.000   LOW       0.587   HIGH         0.587
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER     0001    0001    0001    0000    0000    0001    0001      0001    0001    0001      0001    0001     0001    0001      0001
N DET.     0001    0000    0000    0000    0000    0000    0000      0000    0000    0000      0001    0001     0000    0001      0000
MEAN      0.000   0.440   0.650   0.000   0.000   0.080   0.290     3.920   24.61   0.270     0.000   0.000    0.850   0.000     0.300
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000     0.000    0.00   0.000     0.000   0.000    0.000   0.000     0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000     0.000    0.00   0.000     0.000   0.000    0.000   0.000     0.000
HIGH      0.000   0.440   0.650   0.000   0.000   0.080   0.290     3.920   24.61   0.270     0.000   0.000    0.850   0.000     0.300
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

REPORT

LOCATION LEVEL 5

POUT, OCEAN MACROZOARCES AMERICANUS 056018 AREA- NORTH ATLANTIC SITE- I9 MUSCLE

LENGTH NUM 11 MEAN 0.727 S. D. 0.155 LOW 0.347 HIGH 0.870
WEIGHT NUM 8 MEAN 1.873 S. D. 0.964 LOW 0.186 HIGH 2.921

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0010	0010	0011	0011	0011	0011	0011	0011	0011	0011	0011	001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0010	0000	0001	000
MEAN	0.109	0.257	0.067	2.971	0.522	0.032	0.204	0.297	8.61	0.215	0.060	0.130	0.125	0.666	0.56
S. D.	0.052	0.132	0.027	1.088	0.310	0.011	0.180	0.127	3.30	0.089	0.000	0.000	0.066	0.163	0.12
LOW	0.052	0.130	0.030	0.710	0.100	0.010	0.040	0.040	4.50	0.110	0.000	0.000	0.070	0.410	0.360
HIGH	0.200	0.560	0.120	5.170	1.130	0.050	0.650	0.475	14.40	0.395	0.060	0.130	0.305	0.940	0.750

POUT, OCEAN MACROZOARCES AMERICANUS 056018 AREA- NORTH ATLANTIC SITE- I9 LIVER

LENGTH NUM 1 MEAN 0.793 S. D. 0.000 LOW 0.793 HIGH 0.793
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	000
MEAN	0.000	0.380	1.630	5.050	1.750	0.080	0.380	4.500	20.63	0.250	0.250	0.440	0.600	0.560	1.75
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.000	0.380	1.630	5.050	1.750	0.080	0.380	4.500	20.63	0.250	0.250	0.440	0.600	0.560	1.75

POUT, OCEAN MACROZOARCES AMERICANUS 056018 AREA- NORTH ATLANTIC SITE- J7 MUSCLE

LENGTH NUM 1 MEAN 0.585 S. D. 0.000 LOW 0.585 HIGH 0.585
WEIGHT NUM 1 MEAN 0.944 S. D. 0.000 LOW 0.944 HIGH 0.944

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	000
MEAN	0.000	0.380	0.080	2.725	0.700	0.030	0.060	0.630	12.50	0.230	0.000	0.000	0.110	0.780	0.63
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.000	0.380	0.080	2.725	0.700	0.030	0.060	0.630	12.50	0.230	0.000	0.000	0.110	0.780	0.63

POUT, OCEAN MACROZOARCES AMERICANUS 056018 AREA- NORTH ATLANTIC SITE- J9 MUSCLE

LENGTH NUM 1 MEAN 0.540 S. D. 0.000 LOW 0.540 HIGH 0.540
WEIGHT NUM 1 MEAN 0.830 S. D. 0.000 LOW 0.830 HIGH 0.830

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	000
MEAN	0.040	0.480	0.090	6.750	0.490	0.000	0.130	0.220	11.88	0.180	0.000	0.000	0.140	0.750	1.09
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.040	0.480	0.090	6.750	0.490	0.000	0.130	0.220	11.88	0.180	0.000	0.000	0.140	0.750	1.09

POUT, OCEAN MACROZOARCES AMERICANUS 056018 AREA- NORTH ATLANTIC SITE- N2 MUSCLE

LENGTH NUM 11 MEAN 0.547 S. D. 0.101 LOW 0.378 HIGH 0.720
WEIGHT NUM 11 MEAN 1.015 S. D. 0.426 LOW 0.336 HIGH 1.861

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0011	0000	0009	000
MEAN	0.139	0.368	0.097	1.915	0.515	0.033	0.155	0.282	10.04	0.230	0.310	0.000	0.115	0.375	0.52
S. D.	0.045	0.268	0.056	0.585	0.160	0.010	0.062	0.109	2.29	0.056	0.000	0.000	0.037	0.177	0.17
LOW	0.070	0.190	0.055	0.970	0.260	0.020	0.060	0.125	6.75	0.145	0.000	0.000	0.060	0.250	0.34
HIGH	0.220	1.130	0.250	2.830	0.780	0.050	0.250	0.500	15.38	0.370	0.310	0.000	0.190	0.500	1.00

POUT, OCEAN MACROZOARCES AMERICANUS 056018 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

LENGTH NUM 5 MEAN 0.552 S. D. 0.038 LOW 0.514 HIGH 0.605
WEIGHT NUM 5 MEAN 1.067 S. D. 0.259 LOW 0.694 HIGH 1.328

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0004	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0003	0000	0000	000
MEAN	0.131	0.476	0.052	3.563	0.834	0.039	0.115	0.383	12.00	0.212	0.055	0.175	0.105	0.687	0.41
S. D.	0.081	0.140	0.016	1.193	0.266	0.019	0.031	0.065	1.74	0.036	0.023	0.021	0.005	0.178	0.13
LOW	0.060	0.285	0.035	2.483	0.606	0.020	0.080	0.315	10.78	0.170	0.030	0.160	0.100	0.485	0.22
HIGH	0.225	0.655	0.070	5.183	1.120	0.070	0.160	0.490	15.00	0.240	0.075	0.190	0.110	0.940	0.56

POUT, OCEAN MACROZOARCES AMERICANUS 056018 AREA- NORTH ATLANTIC SITE- P1 MUSCLE

LENGTH NUM 3 MEAN 0.685 S. D. 0.035 LOW 0.660 HIGH 0.725
WEIGHT NUM 3 MEAN 1.143 S. D. 0.210 LOW 0.967 HIGH 1.376

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	000
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0003	0000	0000	000
MEAN	0.030	0.252	0.037	3.139	0.997	0.035	0.228	0.197	14.23	0.240	0.110	0.000	0.067	0.528	0.61
S. D.	0.000	0.107	0.008	1.234	0.111	0.009	0.123	0.115	5.42	0.045	0.071	0.000	0.042	0.151	0.11
LOW	0.000	0.190	0.030	2.000	0.905	0.025	0.155	0.130	9.25	0.195	0.060	0.000	0.020	0.390	0.53
HIGH	0.030	0.375	0.045	4.450	1.120	0.040	0.370	0.330	20.00	0.285	0.160	0.000	0.100	0.690	0.75

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                                                  TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                          REPORT   MF17
                                                 IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                                 BY TISSUE AND LOCATION

 POUT, OCEAN                           MACROZOARCES AMERICANUS              056018   AREA- NORTH ATLANTIC       SITE- P1   LIVER

 NGTH        NUM    1    MEAN          0.685     S. D.       0.000    LOW        0.685    HIGH          0.685
 IGHT        NUM    1    MEAN          1.143     S. D.       0.000    LOW        1.143    HIGH          1.143
           MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

 MBER        0001    0001    0001    0001    0001    0001    0001     0001    0001    0001      0001    0001    0001    0001    0001
 DET.        0001    0000    0000    0000    0000    0000    0000     0000    0000    0000      0001    0001    0000    0000    0000
 AN          0.000   0.560   0.710   4.675   1.700   0.030   0.120    0.870   13.75   0.290     0.000   0.000   0.690   0.500   0.690
  D.         0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
LOW          0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
HIGH         0.000   0.560   0.710   4.675   1.700   0.030   0.120    0.870   13.75   0.290     0.000   0.000   0.690   0.500   0.690

 FLOUNDER, GULF                        PARALICHTHYS ALBIGUTTA               058024   AREA- GULF                 SITE- D5   MUSCLE

LENGTH       NUM    0    MEAN          0.000     S. D.       0.000    LOW        0.000    HIGH          0.000
WEIGHT       NUM   18    MEAN          0.858     S. D.       0.379    LOW        0.446    HIGH          1.638
           MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

 MBER        0019    0020    0020    0018    0019    0020    0020     0019    0019    0020      0020    0020    0019    0020    0020
 DET.        0005    0000    0003    0000    0000    0004    0001     0000    0000    0000      0016    0017    0000    0001    0000
MEAN         0.101   0.468   0.063   2.910   0.723   0.027   0.185    0.186    4.00   0.193     0.229   0.170   0.233   0.786   0.480
S. D.        0.091   0.309   0.022   1.591   0.323   0.014   0.129    0.061    1.08   0.092     0.111   0.125   0.064   0.275   0.112
LOW          0.020   0.150   0.010   0.755   0.380   0.010   0.075    0.085    2.21   0.030     0.100   0.070   0.125   0.380   0.310
 IGH         0.370   1.250   0.090   7.000   1.720   0.060   0.560    0.330    7.25   0.395     0.370   0.310   0.370   1.400   0.690

 FLOUNDER, GULF                        PARALICHTHYS ALBIGUTTA               058024   AREA- GULF                 SITE- D5   LIVER

LENGTH       NUM    0    MEAN          0.000     S. D.       0.000    LOW        0.000    HIGH          0.000
WEIGHT       NUM    1    MEAN          1.194     S. D.       0.000    LOW        1.194    HIGH          1.194
           MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER       0001    0001    0001    0001    0001    0001    0001     0001    0001    0001      0001    0001    0001    0001    0001
N DET.       0000    0000    0000    0000    0000    0000    0000     0000    0000    0000      0001    0001    0000    0000    0000
MEAN         0.090   0.100   0.180   2.150   0.850   0.070   1.650   12.500   98.90   0.500     0.000   0.000   1.460   1.100   0.350
S. D.        0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
 OW          0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
 IGH         0.090   0.100   0.180   2.150   0.850   0.070   1.650   12.500   98.90   0.500     0.000   0.000   1.460   1.100   0.350

 FLOUNDER, GULF                        PARALICHTHYS ALBIGUTTA               058024   AREA- GULF                 SITE- E5   MUSCLE

 ENGTH       NUM   20    MEAN          0.378     S. D.       0.078    LOW        0.280    HIGH          0.570
 EIGHT       NUM   20    MEAN          0.775     S. D.       0.529    LOW        0.248    HIGH          2.350
           MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER       0020    0020    0020    0018    0017    0020    0020     0020    0020    0020      0020    0020    0020    0020    0020
N DET.       0000    0001    0001    0000    0000    0004    0000     0000    0000    0000      0017    0016    0000    0002    0000
 EAN         0.222   0.423   0.062   3.412   0.902   0.029   0.203    0.214    3.82   0.203     0.260   0.228   0.145   0.723   0.505
 . D.        0.104   0.281   0.029   1.445   0.290   0.010   0.187    0.123    1.10   0.086     0.121   0.266   0.050   0.206   0.173
 OW          0.020   0.190   0.020   0.500   0.280   0.010   0.050    0.060    1.40   0.040     0.130   0.060   0.070   0.400   0.050
 IGH         0.480   1.310   0.140   6.000   1.400   0.045   0.890    0.580    6.06   0.410     0.370   0.620   0.230   1.250   1.000

 FLOUNDER, GULF                        PARALICHTHYS ALBIGUTTA               058024   AREA- GULF                 SITE- H2   MUSCLE

 ENGTH       NUM    1    MEAN          0.356     S. D.       0.000    LOW        0.356    HIGH          0.356
 EIGHT       NUM    1    MEAN          0.605     S. D.       0.000    LOW        0.605    HIGH          0.605
           MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER       0001    0001    0001    0001    0001    0001    0001     0001    0001    0001      0001    0001    0001    0001    0001
 DET.        0000    0000    0001    0000    0000    0000    0000     0000    0000    0001      0001    0001    0000    0000    0000
 EAN         0.285   0.250   0.000   5.190   0.540   0.040   0.175    0.105    3.43   0.000     0.000   0.000   0.680   2.380   0.400
 . D.        0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
LOW          0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
HIGH         0.285   0.250   0.000   5.190   0.540   0.040   0.175    0.105    3.43   0.000     0.000   0.000   0.680   2.380   0.400

 FLOUNDER, SUMMER (FLUKE)              PARALICHTHYS DENTATUS                058026   AREA- SOUTH ATLANTIC       SITE- B5   MUSCLE

LENGTH       NUM   10    MEAN          0.408     S. D.       0.080    LOW        0.318    HIGH          0.568
WEIGHT       NUM   10    MEAN          0.819     S. D.       0.611    LOW        0.255    HIGH          2.041
           MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER       0010    0010    0010    0009    0009    0010    0010     0010    0010    0010      0010    0010    0010    0010    0010
N DET.       0000    0002    0004    0000    0000    0005    0001     0000    0000    0004      0007    0007    0000    0004    0000
MEAN         0.208   0.452   0.058  10.332   0.801   0.034   0.159    0.248    4.34   0.200     0.253   0.327   0.156   0.783   0.460
S. D.        0.089   0.316   0.025   3.868   0.222   0.013   0.061    0.181    1.05   0.080     0.225   0.264   0.080   0.303   0.088
LOW          0.075   0.130   0.030   5.333   0.565   0.010   0.055    0.110    2.67   0.090     0.030   0.150   0.080   0.410   0.300
HIGH         0.380   1.125   0.100  16.800   1.330   0.040   0.275    0.750    6.07   0.320     0.480   0.630   0.305   1.250   0.595

 FLOUNDER, SUMMER (FLUKE)              PARALICHTHYS DENTATUS                058026   AREA- SOUTH ATLANTIC       SITE- B5   LIVER

LENGTH       NUM    1    MEAN          0.370     S. D.       0.000    LOW        0.370    HIGH          0.370
WEIGHT       NUM    1    MEAN          0.521     S. D.       0.000    LOW        0.521    HIGH          0.521
           MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER       0001    0001    0001    0001    0000    0001    0001     0001    0001    0001      0001    0001    0001    0001    0001
N DET.       0000    0000    0000    0000    0000    0000    0000     0000    0000    0000      0000    0000    0000    0000    0000
MEAN         0.110   0.500   0.390   1.550   0.000   0.060   0.130   32.500   44.38   0.610     0.250   0.130   0.760   0.630   0.750
S. D.        0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
LOW          0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
HIGH         0.110   0.500   0.390   1.550   0.000   0.060   0.130   32.500   44.38   0.610     0.250   0.130   0.760   0.630   0.750
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

FLOUNDER, SUMMER (FLUKE) PARALICHTHYS DENTATUS 058026 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH	NUM	20	MEAN	0.368	S. D.	0.069	LOW	0.302	HIGH	0.456
WEIGHT	NUM	20	MEAN	0.759	S. D.	0.407	LOW	0.369	HIGH	1.362

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PP
NUMBER	0020	0019	0020	0019	0019	0020	0019	0020	0020	0020	0020	0020	0020	0020	00
N DET.	0006	0000	0003	0000	0000	0002	0001	0001	0000	0002	0014	0015	0000	0004	00
MEAN	0.119	0.493	0.075	4.370	0.649	0.034	0.177	0.290	4.77	0.212	0.162	0.261	0.314	0.827	0.5
S. D.	0.054	0.276	0.042	2.633	0.248	0.025	0.074	0.347	0.98	0.147	0.106	0.156	0.194	0.454	0.1
LOW	0.030	0.190	0.020	0.480	0.275	0.010	0.060	0.060	2.78	0.040	0.080	0.100	0.070	0.380	0.03
HIGH	0.225	1.193	0.180	10.100	1.070	0.095	0.325	1.620	6.35	0.610	0.360	0.500	0.750	2.100	0.71

FLOUNDER, SUMMER (FLUKE) PARALICHTHYS DENTATUS 058026 AREA- SOUTH ATLANTIC SITE- C2 LIVER

LENGTH	NUM	1	MEAN	0.430	S. D.	0.000	LOW	0.430	HIGH	0.430
WEIGHT	NUM	1	MEAN	1.106	S. D.	0.000	LOW	1.106	HIGH	1.106

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	00
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	00
MEAN	0.000	0.000	0.340	4.500	1.120	0.030	0.690	3.500	139.06	0.210	0.000	0.000	0.940	0.810	0.38
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.000	0.000	0.340	4.500	1.120	0.030	0.690	3.500	139.06	0.210	0.000	0.000	0.940	0.810	0.3

FLOUNDER, SUMMER (FLUKE) PARALICHTHYS DENTATUS 058026 AREA- SOUTH ATLANTIC SITE- J4 MUSCLE

LENGTH	NUM	7	MEAN	0.346	S. D.	0.064	LOW	0.281	HIGH	0.450
WEIGHT	NUM	6	MEAN	0.774	S. D.	0.456	LOW	0.445	HIGH	1.361

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	001
N DET.	0000	0001	0005	0000	0000	0006	0001	0001	0000	0001	0009	0009	0000	0005	000
MEAN	0.156	0.542	0.100	5.355	0.715	0.068	0.227	0.222	5.09	0.262	0.390	0.457	0.255	0.798	0.46
S. D.	0.080	0.466	0.062	4.391	0.258	0.056	0.177	0.106	1.31	0.131	0.312	0.341	0.138	0.590	0.13
LOW	0.030	0.185	0.040	0.700	0.180	0.020	0.135	0.135	3.12	0.040	0.100	0.100	0.110	0.360	0.31
HIGH	0.330	1.750	0.190	14.060	1.020	0.140	0.750	0.530	7.51	0.430	0.720	0.780	0.610	2.050	0.75

FLOUNDER, SOUTHERN PARALICHTHYS LETHOSTIGMA 058027 AREA- SOUTH ATLANTIC SITE- F3 MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	001
N DET.	0001	0000	0002	0000	0000	0005	0000	0000	0000	0002	0010	0009	0000	0005	000
MEAN	0.092	0.370	0.060	5.694	0.920	0.034	0.198	0.205	3.95	0.210	0.300	0.400	0.260	0.804	0.57
S. D.	0.036	0.218	0.029	1.702	0.590	0.015	0.130	0.087	0.73	0.084	0.365	0.251	0.086	0.515	0.26
LOW	0.050	0.100	0.030	3.310	0.390	0.010	0.050	0.070	2.94	0.080	0.060	0.040	0.110	0.440	0.20
HIGH	0.170	0.880	0.135	8.500	2.610	0.060	0.530	0.345	5.39	0.320	0.720	0.620	0.410	1.830	1.11

FLOUNDER, SOUTHERN PARALICHTHYS LETHOSTIGMA 058027 AREA- SOUTH ATLANTIC SITE- F3 LIVER

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	000
MEAN	0.040	0.120	0.090	3.122	0.620	0.040	0.160	26.430	62.50	0.030	0.370	0.620	0.710	0.870	0.62
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.040	0.120	0.090	3.122	0.620	0.040	0.160	26.430	62.50	0.030	0.370	0.620	0.710	0.870	0.62

FLOUNDER, SOUTHERN PARALICHTHYS LETHOSTIGMA 058027 AREA- SOUTH ATLANTIC SITE- G7 MUSCLE

LENGTH	NUM	10	MEAN	0.404	S. D.	0.012	LOW	0.375	HIGH	0.413
WEIGHT	NUM	10	MEAN	0.731	S. D.	0.074	LOW	0.593	HIGH	0.870

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0010	0010	0010	0010	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	001
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0008	0008	0000	0001	000
MEAN	0.095	0.357	0.078	3.228	0.908	0.042	0.165	0.253	3.73	0.226	0.190	0.470	0.129	0.599	0.51
S. D.	0.067	0.136	0.039	1.784	0.234	0.015	0.076	0.108	0.99	0.078	0.085	0.552	0.030	0.171	0.20
LOW	0.020	0.130	0.045	0.960	0.390	0.020	0.080	0.120	2.59	0.130	0.130	0.080	0.085	0.280	0.34
HIGH	0.180	0.565	0.180	6.150	1.140	0.075	0.310	0.415	5.34	0.360	0.250	0.860	0.180	0.880	0.91

FLOUNDER, SOUTHERN PARALICHTHYS LETHOSTIGMA 058027 AREA- GULF SITE- B8 MUSCLE

LENGTH	NUM	4	MEAN	0.392	S. D.	0.110	LOW	0.236	HIGH	0.500
WEIGHT	NUM	3	MEAN	0.983	S. D.	0.065	LOW	0.908	HIGH	1.021

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	00
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0000	00
MEAN	0.067	0.674	0.086	2.839	0.764	0.125	0.199	0.218	5.15	0.234	0.160	0.330	0.727	0.941	0.5
S. D.	0.064	0.221	0.029	0.857	0.159	0.177	0.156	0.020	0.57	0.036	0.000	0.000	0.584	0.241	0.2
LOW	0.020	0.440	0.055	1.805	0.660	0.020	0.060	0.200	4.38	0.200	0.000	0.000	0.190	0.735	0.3
HIGH	0.140	0.940	0.120	3.650	1.000	0.390	0.396	0.245	5.75	0.270	0.160	0.330	1.305	1.280	0.8

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                                                       TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                    REPORT   MF17
                                                      IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                                     BY TISSUE AND LOCATION

 FLOUNDER, SOUTHERN                PARALICHTHYS LETHOSTIGMA          058027   AREA- GULF                     SITE- G5   MUSCLE

LENGTH      NUM   15   MEAN          0.415   S. D.       0.077   LOW       0.318   HIGH         0.520
WEIGHT      NUM   14   MEAN          1.130   S. D.       0.646   LOW       0.426   HIGH         2.043
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0015    0014    0015    0015    0015    0015    0015    0015    0015    0015      0015    0015    0015    0015    0015
N DET.      0000    0000    0000    0000    0000    0001    0001    0000    0000    0000      0014    0014    0000    0011    0000
MEAN       0.105   0.451   0.065   4.156   1.075   0.026   0.204   0.226    3.45   0.208     0.380   0.250   0.207   0.610   0.502
S. D.      0.096   0.116   0.034   2.336   0.396   0.011   0.103   0.092    0.49   0.077     0.000   0.000   0.068   0.107   0.194
LOW        0.040   0.315   0.040   1.166   0.610   0.010   0.095   0.050    2.97   0.080     0.000   0.000   0.110   0.500   0.030
HIGH       0.430   0.630   0.180  10.615   2.090   0.050   0.390   0.410    4.94   0.310     0.380   0.250   0.400   0.750   0.840

 FLOUNDER, SOUTHERN                PARALICHTHYS LETHOSTIGMA          058027   AREA- GULF                     SITE- G5   LIVER

LENGTH      NUM   1    MEAN          0.335   S. D.       0.000   LOW       0.335   HIGH         0.335
WEIGHT      NUM   1    MEAN          0.525   S. D.       0.000   LOW       0.525   HIGH         0.525
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0001    0001    0001    0000    0000    0001    0001    0001    0001    0001      0001    0001    0001    0001    0001
N DET.      0001    0000    0000    0000    0000    0000    0000    0000    0000    0000      0001    0001    0000    0000    0000
MEAN       0.000   0.540   0.160   0.000   0.000   0.020   0.540  15.220   92.39   0.210     0.000   0.000   0.890   0.760   0.870
S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
HIGH       0.000   0.540   0.160   0.000   0.000   0.020   0.540  15.220   92.39   0.210     0.000   0.000   0.890   0.760   0.870

 FLOUNDER, FOURSPOT                PARALICHTHYS OBLONGUS             058028   AREA- NORTH ATLANTIC           SITE- N2   MUSCLE

LENGTH      NUM   2    MEAN          0.262   S. D.       0.011   LOW       0.254   HIGH         0.269
WEIGHT      NUM   2    MEAN          0.147   S. D.       0.015   LOW       0.136   HIGH         0.157
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0002    0002    0002    0002    0002    0002    0002    0002    0002    0002      0002    0002    0002    0002    0002
N DET.      0000    0000    0000    0000    0000    0000    0001    0000    0000    0000      0002    0002    0000    0001    0000
MEAN       0.055   0.190   0.050   2.235   0.425   0.025   0.150   0.440    2.03   0.185     0.000   0.000   0.365   0.440   0.660
S. D.      0.049   0.000   0.042   0.431   0.177   0.007   0.000   0.184    0.66   0.106     0.000   0.000   0.106   0.000   0.042
LOW        0.020   0.190   0.020   1.930   0.300   0.020   0.000   0.310    1.56   0.110     0.000   0.000   0.290   0.000   0.630
HIGH       0.090   0.190   0.080   2.540   0.550   0.030   0.150   0.570    2.50   0.260     0.000   0.000   0.440   0.440   0.690

 FLOUNDER, FOURSPOT                PARALICHTHYS OBLONGUS             058028   AREA- NORTH ATLANTIC           SITE- N3   MUSCLE

LENGTH      NUM   2    MEAN          0.237   S. D.       0.039   LOW       0.209   HIGH         0.264
WEIGHT      NUM   2    MEAN          0.112   S. D.       0.035   LOW       0.087   HIGH         0.137
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0002    0002    0002    0002    0002    0002    0002    0002    0002    0002      0002    0002    0002    0002    0002
N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000      0002    0001    0000    0000    0000
MEAN       0.053   0.435   0.060   6.113   0.603   0.038   0.060   0.258    3.70   0.225     0.000   0.190   0.223   0.738   0.440
S. D.      0.018   0.007   0.000   0.654   0.039   0.004   0.000   0.032    0.86   0.078     0.000   0.000   0.081   0.329   0.000
LOW        0.040   0.430   0.060   5.650   0.575   0.035   0.060   0.235    3.09   0.170     0.000   0.000   0.165   0.505   0.440
HIGH       0.065   0.440   0.060   6.575   0.630   0.040   0.060   0.280    4.31   0.280     0.000   0.190   0.280   0.970   0.440

 FLOUNDER, FOURSPOT                PARALICHTHYS OBLONGUS             058028   AREA- NORTH ATLANTIC           SITE- N5   MUSCLE

LENGTH      NUM   5    MEAN          0.246   S. D.       0.018   LOW       0.228   HIGH         0.273
WEIGHT      NUM   5    MEAN          0.104   S. D.       0.020   LOW       0.079   HIGH         0.129
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0005    0005    0005    0005    0005    0005    0005    0005    0005    0005      0005    0005    0005    0005    0005
N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000      0005    0005    0000    0002    0000
MEAN       0.143   0.448   0.078   6.657   0.503   0.035   0.261   0.220    3.45   0.216     0.000   0.000   0.213   0.597   0.526
S. D.      0.103   0.194   0.034   2.137   0.133   0.006   0.210   0.080    0.41   0.045     0.000   0.000   0.040   0.311   0.142
LOW        0.055   0.230   0.046   3.160   0.315   0.025   0.130   0.080    3.16   0.170     0.000   0.000   0.150   0.250   0.410
HIGH       0.260   0.750   0.135   8.600   0.650   0.040   0.630   0.270    4.06   0.285     0.000   0.000   0.250   0.850   0.766

 FLOUNDER, FOURSPOT                PARALICHTHYS OBLONGUS             058028   AREA- NORTH ATLANTIC           SITE- N6   MUSCLE

LENGTH      NUM   6    MEAN          0.225   S. D.       0.018   LOW       0.205   HIGH         0.244
WEIGHT      NUM   6    MEAN          0.080   S. D.       0.017   LOW       0.062   HIGH         0.102
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0006    0006    0006    0006    0006    0006    0006    0006    0006    0006      0006    0006    0006    0006    0006
N DET.      0001    0000    0000    0000    0000    0000    0000    0000    0000    0000      0006    0006    0000    0002    0000
MEAN       0.109   0.476   0.103   4.485   0.523   0.044   0.185   0.322    3.48   0.221     0.000   0.000   0.251   0.518   0.575
S. D.      0.083   0.217   0.062   2.488   0.288   0.012   0.044   0.113    0.66   0.061     0.000   0.000   0.034   0.177   0.207
LOW        0.040   0.250   0.050   1.070   0.120   0.030   0.130   0.235    2.25   0.130     0.000   0.000   0.190   0.380   0.280
HIGH       0.250   0.880   0.220   8.375   0.830   0.060   0.250   0.525    4.08   0.310     0.000   0.000   0.290   0.750   0.810

 FLOUNDER, FOURSPOT                PARALICHTHYS OBLONGUS             058028   AREA- NORTH ATLANTIC           SITE- N7   MUSCLE

LENGTH      NUM   3    MEAN          0.273   S. D.       0.049   LOW       0.243   HIGH         0.330
WEIGHT      NUM   3    MEAN          0.179   S. D.       0.103   LOW       0.119   HIGH         0.298
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0003    0003    0003    0003    0003    0003    0003    0003    0003    0003      0003    0003    0003    0003    0003
N DET.      0001    0000    0000    0000    0000    0000    0000    0000    0000    0000      0003    0003    0000    0000    0000
MEAN       0.145   0.303   0.075   5.447   0.471   0.038   0.195   0.327    3.69   0.170     0.000   0.000   0.210   0.713   0.583
S. D.      0.177   0.080   0.035   2.217   0.136   0.003   0.190   0.194    0.57   0.040     0.000   0.000   0.053   0.359   0.318
LOW        0.020   0.220   0.050   3.050   0.385   0.035   0.050   0.200    3.28   0.140     0.000   0.000   0.155   0.310   0.220
HIGH       0.270   0.380   0.115   7.425   0.627   0.040   0.410   0.550    4.34   0.215     0.000   0.000   0.260   1.000   0.810
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

FLOUNDER, FOURSPOT PARALICHTHYS OBLONGUS 058028 AREA- NORTH ATLANTIC SITE- N8 MUSCLE

LENGTH	NUM	4	MEAN	0.235	S. D.	0.035	LOW	0.211	HIGH	0.286
WEIGHT	NUM	4	MEAN	0.114	S. D.	0.057	LOW	0.071	HIGH	0.196

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0003	0004	0004	0004	0004	0004	0004	0004	00
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0004	0000	0000	00
MEAN	0.118	0.346	0.058	6.289	0.784	0.033	0.150	0.305	4.25	0.229	0.000	0.000	0.194	0.314	0.4
S. D.	0.131	0.132	0.010	2.485	0.428	0.013	0.092	0.124	2.00	0.075	0.000	0.000	0.073	0.237	0.0
LOW	0.020	0.160	0.045	3.375	0.350	0.020	0.070	0.180	2.44	0.140	0.000	0.000	0.110	0.060	0.30
HIGH	0.310	0.440	0.070	9.175	1.370	0.050	0.250	0.470	6.98	0.320	0.000	0.000	0.285	0.630	0.50

FLOUNDER, FOURSPOT PARALICHTHYS OBLONGUS 058028 AREA- NORTH ATLANTIC SITE- O1 MUSCLE

LENGTH	NUM	18	MEAN	0.291	S. D.	0.053	LOW	0.228	HIGH	0.420
WEIGHT	NUM	18	MEAN	0.219	S. D.	0.147	LOW	0.090	HIGH	0.579

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0018	0016	0018	0018	0018	0018	0018	0018	0018	0018	0018	0018	0018	0018	00
N DET.	0002	0000	0000	0000	0000	0004	0002	0000	0000	0000	0016	0017	0000	0003	00
MEAN	0.108	0.335	0.079	9.323	0.518	0.035	0.256	0.315	3.92	0.231	0.250	0.250	0.200	0.574	0.49
S. D.	0.082	0.160	0.046	6.593	0.249	0.011	0.214	0.177	2.23	0.158	0.184	0.000	0.107	0.224	0.16
LOW	0.040	0.060	0.020	0.470	0.080	0.020	0.030	0.060	0.94	0.060	0.120	0.000	0.070	0.190	0.19
HIGH	0.350	0.630	0.180	27.000	1.015	0.060	0.810	0.750	10.31	0.750	0.380	0.250	0.500	0.940	0.8

FLOUNDER, FOURSPOT PARALICHTHYS OBLONGUS 058028 AREA- NORTH ATLANTIC SITE- O2 MUSCLE

LENGTH	NUM	19	MEAN	0.263	S. D.	0.040	LOW	0.187	HIGH	0.395
WEIGHT	NUM	19	MEAN	0.158	S. D.	0.092	LOW	0.079	HIGH	0.512

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0019	0018	0019	0018	0018	0019	0018	0019	0019	0019	0018	0018	0019	0019	00
N DET.	0003	0000	0000	0000	0000	0001	0000	0000	0000	0000	0018	0016	0000	0015	000
MEAN	0.103	0.366	0.081	3.901	0.401	0.039	0.301	0.251	3.80	0.208	0.000	0.295	0.209	0.491	0.44
S. D.	0.052	0.222	0.034	1.850	0.223	0.015	0.255	0.105	1.20	0.058	0.000	0.021	0.067	0.268	0.1
LOW	0.040	0.130	0.040	1.340	0.060	0.010	0.060	0.080	1.63	0.090	0.000	0.280	0.080	0.120	0.1
HIGH	0.230	1.000	0.180	7.525	0.870	0.070	0.940	0.495	7.75	0.330	0.000	0.310	0.395	0.750	0.6

FLOUNDER, FOURSPOT PARALICHTHYS OBLONGUS 058028 AREA- NORTH ATLANTIC SITE- O3 MUSCLE

LENGTH	NUM	4	MEAN	0.309	S. D.	0.070	LOW	0.265	HIGH	0.413
WEIGHT	NUM	4	MEAN	0.259	S. D.	0.211	LOW	0.140	HIGH	0.575

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0004	0000	0000	000
MEAN	0.055	0.290	0.064	3.923	0.471	0.041	0.168	0.365	3.96	0.240	0.000	0.000	0.216	0.730	0.6
S. D.	0.049	0.177	0.015	1.326	0.231	0.023	0.080	0.102	1.61	0.110	0.000	0.000	0.077	0.279	0.1
LOW	0.020	0.130	0.050	2.875	0.140	0.010	0.050	0.280	1.88	0.130	0.000	0.000	0.110	0.380	0.5
HIGH	0.090	0.530	0.085	5.740	0.650	0.065	0.230	0.510	5.25	0.380	0.000	0.000	0.285	0.970	0.9

FLOUNDER, FOURSPOT PARALICHTHYS OBLONGUS 058028 AREA- NORTH ATLANTIC SITE- P1 MUSCLE

LENGTH	NUM	6	MEAN	0.275	S. D.	0.014	LOW	0.255	HIGH	0.293
WEIGHT	NUM	6	MEAN	0.128	S. D.	0.022	LOW	0.109	HIGH	0.166

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	000
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0002	0000	0000	00
MEAN	0.093	0.416	0.053	5.915	0.446	0.032	0.152	0.229	3.17	0.239	0.000	0.335	0.219	0.475	0.5
S. D.	0.103	0.172	0.021	1.824	0.183	0.014	0.100	0.077	0.94	0.107	0.000	0.182	0.051	0.239	0.1
LOW	0.020	0.250	0.030	4.381	0.210	0.010	0.060	0.125	2.31	0.150	0.000	0.090	0.140	0.060	0.25
HIGH	0.270	0.655	0.090	9.025	0.670	0.045	0.315	0.300	4.69	0.440	0.000	0.500	0.290	0.690	0.75

FLOUNDER, FOURSPOT PARALICHTHYS OBLONGUS 058028 AREA- NORTH ATLANTIC SITE- S1 MUSCLE

LENGTH	NUM	1	MEAN	0.177	S. D.	0.000	LOW	0.177	HIGH	0.177
WEIGHT	NUM	1	MEAN	0.046	S. D.	0.000	LOW	0.046	HIGH	0.046

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	000
MEAN	0.110	0.560	0.090	1.780	1.100	0.070	0.190	0.460	6.63	0.380	0.190	0.310	0.390	0.000	0.97
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.110	0.560	0.090	1.780	1.100	0.070	0.190	0.460	6.63	0.380	0.190	0.310	0.390	0.000	0.97

FLOUNDER, FOURSPOT PARALICHTHYS OBLONGUS 058028 AREA- NORTH ATLANTIC SITE- S4 MUSCLE

LENGTH	NUM	1	MEAN	0.237	S. D.	0.000	LOW	0.237	HIGH	0.237
WEIGHT	NUM	1	MEAN	0.098	S. D.	0.000	LOW	0.098	HIGH	0.098

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	000
MEAN	0.080	0.365	0.040	7.200	0.550	0.040	0.225	0.155	3.98	0.140	0.000	0.000	0.450	0.600	0.40
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.080	0.365	0.040	7.200	0.550	0.040	0.225	0.155	3.98	0.140	0.000	0.000	0.450	0.600	0.40

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

REPORT MF17

UNDER, WINDOWPANE (S. DAB)   SCOPHTHALMUS AQUOSUS   058030   AREA- NORTH ATLANTIC   SITE- I8   MUSCLE

GTH NUM 2 MEAN 0.202 S. D. 0.040 LOW 0.173 HIGH 0.230
GHT NUM 2 MEAN 0.179 S. D. 0.099 LOW 0.109 HIGH 0.249

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
BER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
ET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000
N	0.020	0.345	0.070	3.088	0.905	0.035	0.155	0.450	6.22	0.290	0.000	0.250	0.230	0.705	0.675
S. D.	0.000	0.219	0.014	0.088	0.502	0.007	0.134	0.226	0.40	0.071	0.000	0.000	0.141	0.559	0.332
LOW	0.000	0.190	0.060	3.025	0.550	0.030	0.060	0.290	5.94	0.240	0.000	0.000	0.130	0.310	0.440
HIGH	0.020	0.500	0.080	3.150	1.260	0.040	0.250	0.610	6.50	0.340	0.000	0.250	0.330	1.100	0.910

OUNDER, WINDOWPANE (S. DAB)   SCOPHTHALMUS AQUOSUS   058030   AREA- NORTH ATLANTIC   SITE- N2   MUSCLE

LENGTH NUM 4 MEAN 0.229 S. D. 0.064 LOW 0.150 HIGH 0.300
WEIGHT NUM 4 MEAN 0.227 S. D. 0.113 LOW 0.087 HIGH 0.363

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
BER	0004	0004	0004	0004	0004	0004	0003	0004	0004	0004	0004	0004	0004	0004	0004
ET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0004	0004	0000	0000	0000
MEAN	0.140	0.558	0.080	5.810	0.679	0.033	0.137	0.271	6.45	0.350	0.000	0.000	0.290	0.718	0.414
S. D.	0.124	0.313	0.014	4.100	0.093	0.006	0.080	0.067	0.23	0.276	0.000	0.000	0.094	0.162	0.112
LOW	0.020	0.190	0.070	3.125	0.600	0.030	0.060	0.200	6.25	0.160	0.000	0.000	0.200	0.500	0.310
H	0.290	0.940	0.100	11.900	0.805	0.040	0.220	0.355	6.69	0.760	0.000	0.000	0.390	0.850	0.560

LOUNDER, WINDOWPANE (S. DAB)   SCOPHTHALMUS AQUOSUS   058030   AREA- NORTH ATLANTIC   SITE- N3   MUSCLE

LENGTH NUM 1 MEAN 0.267 S. D. 0.000 LOW 0.267 HIGH 0.267
WEIGHT NUM 1 MEAN 0.225 S. D. 0.000 LOW 0.225 HIGH 0.225

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.165	0.500	0.125	2.246	0.460	0.090	0.075	0.310	4.12	0.385	0.000	0.750	0.405	0.380	0.690
D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
GH	0.165	0.500	0.125	2.246	0.460	0.090	0.075	0.310	4.12	0.385	0.000	0.750	0.405	0.380	0.690

FLOUNDER, WINDOWPANE (S. DAB)   SCOPHTHALMUS AQUOSUS   058030   AREA- NORTH ATLANTIC   SITE- N5   MUSCLE

NGTH NUM 7 MEAN 0.221 S. D. 0.053 LOW 0.150 HIGH 0.278
IGHT NUM 7 MEAN 0.163 S. D. 0.068 LOW 0.088 HIGH 0.250

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0005	0007	0007	0007	0007	0007	0007	0007	0006
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0007	0000	0002	0000
AN	0.090	0.568	0.058	3.149	0.574	0.038	0.170	0.326	4.50	0.190	0.130	0.000	0.251	0.512	0.484
D.	0.046	0.340	0.017	1.289	0.113	0.014	0.163	0.205	1.93	0.078	0.000	0.000	0.156	0.274	0.147
W	0.030	0.190	0.030	1.000	0.410	0.020	0.040	0.110	2.00	0.080	0.000	0.000	0.110	0.300	0.310
GH	0.160	1.250	0.075	4.525	0.740	0.060	0.440	0.750	7.13	0.295	0.130	0.000	0.580	0.940	0.705

FLOUNDER, WINDOWPANE (S. DAB)   SCOPHTHALMUS AQUOSUS   058030   AREA- NORTH ATLANTIC   SITE- N7   MUSCLE

NGTH NUM 1 MEAN 0.265 S. D. 0.000 LOW 0.265 HIGH 0.265
IGHT NUM 1 MEAN 0.257 S. D. 0.000 LOW 0.257 HIGH 0.257

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
IMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
AN	0.340	1.130	0.110	3.480	0.900	0.010	0.060	0.330	7.63	0.280	0.000	0.000	0.190	0.750	0.380
D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.340	1.130	0.110	3.480	0.900	0.010	0.060	0.330	7.63	0.280	0.000	0.000	0.190	0.750	0.380

LOUNDER, WINDOWPANE (S. DAB)   SCOPHTHALMUS AQUOSUS   058030   AREA- NORTH ATLANTIC   SITE- O1   MUSCLE

NGTH NUM 2 MEAN 0.307 S. D. 0.023 LOW 0.291 HIGH 0.323
WEIGHT NUM 2 MEAN 0.326 S. D. 0.073 LOW 0.274 HIGH 0.377

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
EAN	0.113	0.393	0.063	6.205	0.608	0.043	0.143	0.333	6.89	0.243	0.000	0.000	0.290	0.740	0.473
S. D.	0.103	0.067	0.004	0.078	0.223	0.004	0.067	0.004	1.13	0.025	0.000	0.000	0.028	0.156	0.046
LOW	0.040	0.345	0.060	6.150	0.450	0.040	0.095	0.330	6.09	0.225	0.000	0.000	0.270	0.630	0.440
IGH	0.185	0.440	0.065	6.260	0.765	0.045	0.190	0.335	7.69	0.260	0.000	0.000	0.310	0.850	0.505

FLOUNDER, WINDOWPANE (S. DAB)   SCOPHTHALMUS AQUOSUS   058030   AREA- NORTH ATLANTIC   SITE- P2   MUSCLE

LENGTH NUM 1 MEAN 0.329 S. D. 0.000 LOW 0.329 HIGH 0.329
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0001	0001	0000	0000	0001	0001	0000	0000	0001	0000	0001	0000	0001	0000
MEAN	0.040	0.000	0.000	14.360	0.500	0.000	0.000	0.180	5.79	0.000	0.075	0.000	0.180	0.000	0.250
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
OW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
IGH	0.040	0.000	0.000	14.360	0.500	0.000	0.000	0.180	5.79	0.000	0.075	0.000	0.180	0.000	0.250

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                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                          REPORT
                                        IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                       BY TISSUE AND LOCATION

 SOLE, PETRALE                    EOPSETTA JORDANI                  059004   AREA- CALIFORNIA          SITE- F4   MUSCLE

LENGTH     NUM   10   MEAN        0.396   S. D.      0.040   LOW      0.340   HIGH       0.450
WEIGHT     NUM   10   MEAN        0.687   S. D.      0.263   LOW      0.420   HIGH       1.120
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0010    0010    0009    0010    0010    0010    0010    0010    0010    0010      0010   0010     0010    0010     0
N DET.     0000    0000    0000    0000    0000    0001    0002    0000    0000    0000      0006   0003     0000    0001     0
MEAN      0.175   0.669   0.105   2.367   0.503   0.076   0.128   0.516    3.71   0.374     0.188  0.293    0.153   0.966    0.
S. D.     0.259   0.301   0.031   1.529   0.258   0.033   0.071   0.199    0.82   0.126     0.255  0.174    0.058   0.437    0.
LOW       0.020   0.240   0.070   0.850   0.190   0.030   0.050   0.130    2.13   0.210     0.060  0.090    0.030   0.250    0.38
HIGH      0.880   1.100   0.170   4.975   0.930   0.140   0.240   0.820    4.91   0.590     0.570  0.620    0.250   1.630    1.37

 SOLE, PETRALE                    EOPSETTA JORDANI                  059004   AREA- CALIFORNIA          SITE- F4   LIVER

LENGTH     NUM   1    MEAN        0.389   S. D.      0.000   LOW      0.389   HIGH       0.389
WEIGHT     NUM   1    MEAN        0.612   S. D.      0.000   LOW      0.612   HIGH       0.612
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM     PPM      PP

NUMBER     0001    0001    0001    0000    0000    0001    0001    0001    0001    0001      0001   0001     0001    0001     0
N DET.     0001    0000    0000    0000    0000    0001    0000    0000    0000    0000      0000   0001     0000    0001     0
MEAN      0.000   0.300   1.430   0.000   0.000   0.000   0.250  13.570   57.14   0.250     0.180  0.000    1.320   0.000    0.55
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000     0.000  0.000    0.000   0.000    0.00
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000     0.000  0.000    0.000   0.000    0.00
HIGH      0.000   0.300   1.430   0.000   0.000   0.000   0.250  13.570   57.14   0.250     0.180  0.000    1.320   0.000    0.

 SOLE, PETRALE                    EOPSETTA JORDANI                  059004   AREA- CALIFORNIA          SITE- F8   MUSCLE

LENGTH     NUM   10   MEAN        0.382   S. D.      0.034   LOW      0.320   HIGH       0.450
WEIGHT     NUM   10   MEAN        0.742   S. D.      0.263   LOW      0.480   HIGH       1.280
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   T
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM     PPM      P

NUMBER     0010    0010    0010    0009    0009    0010    0010    0010    0010    0010      0009   0009     0010    0009     0
N DET.     0000    0000    0001    0000    0000    0001    0000    0000    0000    0000      0006   0005     0000    0000     00
MEAN      0.062   0.523   0.079   2.627   0.613   0.039   0.154   0.256    3.54   0.223     0.060  0.188    0.105   0.576    0.60
S. D.     0.029   0.386   0.030   0.552   0.152   0.006   0.098   0.144    0.47   0.073     0.000  0.113    0.023   0.224    0.2
LOW       0.025   0.160   0.040   1.933   0.370   0.030   0.040   0.070    2.81   0.140     0.060  0.060    0.080   0.130    0.
HIGH      0.110   1.440   0.140   3.505   0.875   0.050   0.320   0.595    4.25   0.390     0.060  0.310    0.160   0.845    1.

 SOLE, PETRALE                    EOPSETTA JORDANI                  059004   AREA- CALIFORNIA          SITE- F8   LIVER

LENGTH     NUM   1    MEAN        0.377   S. D.      0.000   LOW      0.377   HIGH       0.377
WEIGHT     NUM   1    MEAN        0.690   S. D.      0.000   LOW      0.690   HIGH       0.690
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   T
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM     PPM      P

NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001      0001   0001     0001    0001     000
N DET.     0001    0000    0000    0000    0000    0000    0000    0000    0000    0000      0000   0001     0000    0000     000
MEAN      0.000   0.130   1.360   5.100   1.600   0.030   0.130   1.250   29.38   0.190     0.160  0.000    0.640   0.440    0.
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000     0.000  0.000    0.000   0.000    0.
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000     0.000  0.000    0.000   0.000    0.
HIGH      0.000   0.130   1.360   5.100   1.600   0.030   0.130   1.250   29.38   0.190     0.160  0.000    0.640   0.440    0.

 SOLE, PETRALE                    EOPSETTA JORDANI                / 059004   AREA- PACIFIC NORTHWEST   SITE- H7   MUSCLE

LENGTH     NUM   11   MEAN        0.383   S. D.      0.032   LOW      0.360   HIGH       0.445
WEIGHT     NUM   0    MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   T
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM     PPM      PP

NUMBER     0011    0011    0011    0010    0010    0011    0011    0011    0011    0011      0011   0011     0011    0011     00
N DET.     0006    0000    0004    0000    0000    0008    0000    0000    0000    0001      0009   0009     0000    0001     0
MEAN      0.347   0.433   0.056   7.277   0.663   0.037   0.165   0.213    4.62   0.335     0.608  0.135    0.163   0.829    0.
S. D.     0.701   0.244   0.046   2.383   0.183   0.006   0.098   0.094    0.94   0.143     0.725  0.021    0.032   0.641    0.
LOW       0.010   0.200   0.030   3.000   0.400   0.030   0.060   0.110    3.92   0.110     0.095  0.120    0.110   0.310    0.2
HIGH      1.600   1.000   0.160  10.650   0.925   0.040   0.390   0.360    6.43   0.570     1.120  0.150    0.210   2.460    0.50

 SOLE, PETRALE                    EOPSETTA JORDANI                  059004   AREA- PACIFIC NORTHWEST   SITE- H7   LIVER

LENGTH     NUM   2    MEAN        0.400   S. D.      0.042   LOW      0.370   HIGH       0.430
WEIGHT     NUM   0    MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM     PPM      PP

NUMBER     0002    0002    0002    0002    0002    0002    0002    0002    0002    0002      0002   0002     0002    0002     0
N DET.     0002    0000    0000    0000    0000    0002    0000    0000    0000    0000      0001   0001     0000    0001     00
MEAN      0.000   0.470   0.360   5.995   1.650   0.000   0.223   4.515   35.27   0.350     0.120  0.200    0.655   0.190    0.1
S. D.     0.000   0.240   0.042   1.068   0.240   0.000   0.011   4.872    4.93   0.099     0.000  0.000    0.021   0.000    0.03
LOW       0.000   0.300   0.330   5.240   1.480   0.000   0.215   1.070   31.78   0.280     0.000  0.000    0.640   0.000    0.13
HIGH      0.000   0.640   0.390   6.750   1.820   0.000   0.230   7.960   38.75   0.420     0.120  0.200    0.670   0.190    0.1

 SOLE, PETRALE                    EOPSETTA JORDANI                  059004   AREA- PACIFIC NORTHWEST   SITE- H8   MUSCLE

LENGTH     NUM   10   MEAN        0.380   S. D.      0.000   LOW      0.380   HIGH       0.380
WEIGHT     NUM   0    MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TI
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM    PPM      PPM     PPM      PP

NUMBER     0010    0010    0010    0010    0010    0010    0010    0010    0010    0010      0010   0010     0010    0010     00
N DET.     0002    0000    0002    0000    0000    0002    0002    0000    0000    0002      0004   0007     0001    0002     00
MEAN      0.036   0.537   0.061   5.906   0.539   0.038   0.160   0.223    4.34   0.227     0.138  0.663    0.158   0.656    0.6
S. D.     0.023   0.237   0.035   4.754   0.157   0.014   0.056   0.089    0.75   0.118     0.120  0.525    0.031   0.447    0.1
LOW       0.010   0.280   0.030   0.450   0.355   0.020   0.090   0.070    3.40   0.135     0.035  0.060    0.110   0.090    0.3
HIGH      0.080   0.960   0.110  17.100   0.830   0.060   0.250   0.330    5.41   0.440     0.300  1.020    0.200   1.260    0.8
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

SOLE, PETRALE   EOPSETTA JORDANI   059004   AREA- PACIFIC NORTHWEST   SITE- H8   LIVER

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	1	MEAN	0.380	S. D.	0.000	LOW	0.380	HIGH	0.380
WEIGHT	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0001	0000	0001	0000	0001	0000
MEAN	0.030	0.750	0.430	6.500	1.340	0.000	1.105	5.710	100.00	0.000	0.230	0.000	0.640	0.000	0.350
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.030	0.750	0.430	6.500	1.340	0.000	1.105	5.710	100.00	0.000	0.230	0.000	0.640	0.000	0.350

SOLE, PETRALE   EOPSETTA JORDANI   059004   AREA- PACIFIC NORTHWEST   SITE- I7   MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	4	MEAN	0.403	S. D.	0.043	LOW	0.360	HIGH	0.460
WEIGHT	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0003	0003	0004	0003	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000	0000	0000
MEAN	0.071	0.344	0.053	6.141	0.648	0.093	0.090	0.171	3.64	0.208	0.156	0.110	0.118	0.773	0.535
S. D.	0.021	0.069	0.015	3.207	0.100	0.105	0.056	0.045	0.89	0.017	0.078	0.071	0.030	0.319	0.161
LOW	0.050	0.280	0.030	2.782	0.545	0.030	0.040	0.120	2.81	0.185	0.060	0.060	0.090	0.295	0.390
HIGH	0.100	0.440	0.060	9.170	0.745	0.250	0.150	0.230	4.77	0.220	0.250	0.160	0.160	0.950	0.720

SOLE, PETRALE   EOPSETTA JORDANI   059004   AREA- PACIFIC NORTHWEST   SITE- M2   LIVER

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	1	MEAN	0.410	S. D.	0.000	LOW	0.410	HIGH	0.410
WEIGHT	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	0.370	0.490	9.600	1.580	0.020	0.000	3.750	64.37	0.160	0.720	0.260	0.710	1.250	0.560
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.370	0.490	9.600	1.580	0.020	0.000	3.750	64.37	0.160	0.720	0.260	0.710	1.250	0.560

SOLE, PETRALE   EOPSETTA JORDANI   059004   AREA- PACIFIC NORTHWEST   SITE- M8   MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	10	MEAN	0.391	S. D.	0.031	LOW	0.370	HIGH	0.435
WEIGHT	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0001	0002	0000	0000	0006	0001	0000	0000	0001	0009	0010	0000	0003	0000
MEAN	0.180	0.431	0.086	14.887	0.916	0.044	0.287	0.208	3.95	0.365	0.440	0.000	0.103	0.785	0.519
S. D.	0.095	0.207	0.043	11.057	0.351	0.007	0.129	0.081	0.78	0.134	0.000	0.000	0.029	0.554	0.184
LOW	0.065	0.100	0.040	2.140	0.585	0.040	0.135	0.090	3.08	0.175	0.000	0.000	0.070	0.295	0.250
HIGH	0.355	0.836	0.150	33.400	1.785	0.055	0.460	0.390	5.71	0.555	0.440	0.000	0.160	1.700	0.950

SOLE, PETRALE   EOPSETTA JORDANI   059004   AREA- PACIFIC NORTHWEST   SITE- M8   LIVER

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	1	MEAN	0.385	S. D.	0.000	LOW	0.385	HIGH	0.385
WEIGHT	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.055	0.420	0.635	10.706	2.250	0.030	0.397	4.390	29.64	0.330	0.325	0.160	0.840	1.083	0.210
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.055	0.420	0.635	10.706	2.250	0.030	0.397	4.390	29.64	0.330	0.325	0.160	0.840	1.083	0.210

SOLE, PETRALE   EOPSETTA JORDANI   059004   AREA- PACIFIC NORTHWEST   SITE- N1   MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	2	MEAN	0.383	S. D.	0.046	LOW	0.350	HIGH	0.415
WEIGHT	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0001	0002	0002
N DET.	0001	0000	0001	0000	0000	0001	0001	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.045	0.668	0.035	4.945	0.670	0.060	0.206	0.188	4.47	0.175	0.155	0.280	0.126	1.023	0.783
S. D.	0.000	0.300	0.000	0.983	0.071	0.000	0.000	0.088	1.77	0.007	0.000	0.000	0.000	0.279	0.047
LOW	0.000	0.456	0.000	4.250	0.620	0.000	0.000	0.126	3.21	0.170	0.000	0.000	0.000	0.825	0.750
HIGH	0.045	0.880	0.035	5.640	0.720	0.060	0.206	0.250	5.72	0.180	0.155	0.280	0.126	1.220	0.816

FLOUNDER, WITCH   GLYPTOCEPHALUS CYNOGLOSSUS   059005   AREA- NORTH ATLANTIC   SITE- E8   MUSCLE

	NUM		MEAN		S. D.		LOW		HIGH
LENGTH	16	MEAN	0.503	S. D.	0.046	LOW	0.430	HIGH	0.570
WEIGHT	16	MEAN	1.055	S. D.	0.457	LOW	0.553	HIGH	2.412

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0016	0016	0016	0015	0015	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016
N DET.	0003	0000	0000	0000	0000	0004	0004	0000	0000	0000	0013	0015	0000	0001	0001
MEAN	0.156	0.352	0.056	38.530	1.595	0.033	0.129	0.148	2.93	0.215	0.077	0.500	0.121	0.547	0.417
S. D.	0.104	0.135	0.013	20.449	0.609	0.008	0.070	0.050	0.54	0.037	0.029	0.000	0.037	0.125	0.143
LOW	0.020	0.130	0.030	6.050	0.700	0.020	0.050	0.060	2.34	0.160	0.060	0.000	0.050	0.380	0.220
HIGH	0.330	0.690	0.080	65.250	2.890	0.040	0.250	0.260	3.87	0.265	0.110	0.500	0.180	0.810	0.820

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

FLOUNDER, WITCH   GLYPTOCEPHALUS CYNOGLOSSUS   059005   AREA- NORTH ATLANTIC   SITE- I3   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	15	0.485	0.050	0.390	0.545
WEIGHT	15	0.876	0.276	0.449	1.300

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	001
N DET.	0003	0000	0000	0000	0000	0005	0000	0000	0000	0000	0012	0013	0000	0000	000
MEAN	0.111	0.407	0.060	22.539	1.031	0.029	0.111	0.119	2.85	0.210	0.067	0.125	0.120	0.522	0.32
S. D.	0.141	0.134	0.017	8.797	0.325	0.011	0.047	0.041	0.35	0.049	0.040	0.092	0.028	0.143	0.132
LOW	0.030	0.170	0.040	9.070	0.480	0.010	0.050	0.060	2.18	0.140	0.030	0.060	0.060	0.310	0.060
HIGH	0.530	0.620	0.105	42.125	1.700	0.050	0.190	0.195	3.50	0.290	0.110	0.190	0.165	0.815	0.560

FLOUNDER, WITCH   GLYPTOCEPHALUS CYNOGLOSSUS   059005   AREA- NORTH ATLANTIC   SITE- J1   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	5	0.525	0.040	0.465	0.570
WEIGHT	5	1.141	0.153	0.952	1.334

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0004	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	000
N DET.	0002	0000	0000	0000	0000	0001	0000	0000	0000	0000	0005	0003	0000	0000	000
MEAN	0.065	0.352	0.046	19.238	1.100	0.029	0.103	0.131	2.87	0.250	0.000	0.190	0.105	0.523	0.354
S. D.	0.033	0.088	0.005	9.039	0.619	0.010	0.055	0.052	0.20	0.048	0.000	0.000	0.033	0.143	0.079
LOW	0.030	0.250	0.040	11.545	0.436	0.015	0.060	0.060	2.59	0.185	0.000	0.190	0.080	0.370	0.250
HIGH	0.095	0.470	0.050	29.950	1.645	0.040	0.190	0.190	3.06	0.320	0.000	0.190	0.150	0.750	0.45

FLOUNDER, WITCH   GLYPTOCEPHALUS CYNOGLOSSUS   059005   AREA- NORTH ATLANTIC   SITE- J3   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	15	0.499	0.055	0.405	0.580
WEIGHT	15	0.957	0.357	0.425	1.589

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0014	0015	0015
N DET.	0002	0000	0000	0000	0000	0008	0002	0000	0000	0000	0015	0014	0000	0001	0002
MEAN	0.092	0.384	0.054	30.462	1.384	0.029	0.115	0.152	2.85	0.212	0.000	0.280	0.123	0.553	0.395
S. D.	0.060	0.164	0.014	12.390	0.550	0.014	0.051	0.067	0.62	0.036	0.000	0.000	0.038	0.140	0.10
LOW	0.020	0.190	0.030	12.275	0.660	0.010	0.060	0.060	2.12	0.130	0.000	0.000	0.050	0.310	0.22
HIGH	0.200	0.750	0.080	52.000	2.605	0.050	0.230	0.310	4.63	0.250	0.000	0.280	0.200	0.810	0.54

FLOUNDER, WITCH   GLYPTOCEPHALUS CYNOGLOSSUS   059005   AREA- NORTH ATLANTIC   SITE- J4   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	4	0.484	0.034	0.440	0.512
WEIGHT	4	0.792	0.157	0.605	0.983

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000	0004	0003	0000	0000	0000
MEAN	0.088	0.431	0.058	16.360	1.359	0.033	0.178	0.125	2.95	0.219	0.000	0.190	0.129	0.508	0.48
S. D.	0.044	0.145	0.017	8.565	0.359	0.010	0.078	0.055	0.35	0.043	0.000	0.000	0.029	0.185	0.15
LOW	0.040	0.250	0.040	4.800	0.830	0.020	0.095	0.060	2.56	0.170	0.000	0.000	0.090	0.310	0.34
HIGH	0.125	0.560	0.080	24.916	1.630	0.040	0.250	0.180	3.31	0.260	0.000	0.190	0.160	0.750	0.690

FLOUNDER, WITCH   GLYPTOCEPHALUS CYNOGLOSSUS   059005   AREA- NORTH ATLANTIC   SITE- J7   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.330	0.000	0.330	0.330
WEIGHT	1	0.201	0.000	0.201	0.201

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.050	0.630	0.065	9.666	1.083	0.040	0.070	0.225	4.25	0.260	0.000	0.000	0.300	0.535	0.375
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.050	0.630	0.065	9.666	1.083	0.040	0.070	0.225	4.25	0.260	0.000	0.000	0.300	0.535	0.375

FLOUNDER, WITCH   GLYPTOCEPHALUS CYNOGLOSSUS   059005   AREA- NORTH ATLANTIC   SITE- K2   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	10	0.437	0.066	0.334	0.515
WEIGHT	10	0.664	0.321	0.244	1.078

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0002	0000	0000	0000	0000	0004	0001	0000	0000	0000	0009	0007	0000	0000	0000
MEAN	0.093	0.416	0.051	24.732	1.428	0.044	0.114	0.153	2.91	0.216	0.160	0.250	0.129	0.556	0.379
S. D.	0.066	0.160	0.008	21.579	0.708	0.024	0.063	0.055	0.62	0.048	0.000	0.079	0.044	0.126	0.105
LOW	0.040	0.140	0.040	9.293	0.615	0.020	0.060	0.060	2.01	0.140	0.000	0.190	0.080	0.310	0.220
HIGH	0.190	0.630	0.060	76.675	2.610	0.090	0.250	0.250	4.06	0.290	0.160	0.340	0.235	0.750	0.500

FLOUNDER, WITCH   GLYPTOCEPHALUS CYNOGLOSSUS   059005   AREA- NORTH ATLANTIC   SITE- K3   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	3	0.445	0.062	0.375	0.493
WEIGHT	3	0.725	0.228	0.461	0.862

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.163	0.377	0.053	44.529	1.535	0.038	0.150	0.170	3.58	0.250	0.000	0.000	0.217	0.648	0.378
S. D.	0.214	0.065	0.006	18.629	0.215	0.004	0.035	0.036	0.83	0.040	0.000	0.000	0.076	0.128	0.160
LOW	0.040	0.310	0.050	27.837	1.375	0.035	0.130	0.140	2.63	0.210	0.000	0.000	0.130	0.530	0.220
HIGH	0.410	0.440	0.060	64.625	1.780	0.040	0.190	0.210	4.06	0.290	0.000	0.000	0.270	0.785	0.540

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

REPORT MF17

OCATION LEVEL 5

LOUNDER, WITCH GLYPTOCEPHALUS CYNOGLOSSUS 059005 AREA- NORTH ATLANTIC SITE- K4 MUSCLE

NGTH NUM 2 MEAN 0.433 S. D. 0.095 LOW 0.366 HIGH 0.500
IGHT NUM 2 MEAN 0.679 S. D. 0.525 LOW 0.308 HIGH 1.050

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
MBER	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
AN	0.090	0.375	0.070	22.480	1.615	0.030	0.095	0.150	3.01	0.220	0.000	0.000	0.160	0.535	0.440
D.	0.000	0.177	0.000	9.221	0.233	0.000	0.049	0.000	0.28	0.014	0.000	0.000	0.057	0.134	0.141
LOW	0.000	0.250	0.000	15.960	1.450	0.030	0.060	0.150	2.81	0.210	0.000	0.000	0.120	0.440	0.340
HIGH	0.090	0.500	0.070	29.000	1.780	0.030	0.130	0.150	3.20	0.230	0.000	0.000	0.200	0.630	0.540

OLE, REX GLYPTOCEPHALUS ZACHIRUS 059006 AREA- CALIFORNIA SITE- B2 MUSCLE

ENGTH NUM 10 MEAN 0.340 S. D. 0.010 LOW 0.329 HIGH 0.360
WEIGHT NUM 10 MEAN 0.269 S. D. 0.027 LOW 0.229 HIGH 0.315

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
MBER	0010	0010	0010	0009	0008	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
DET.	0000	0000	0002	0001	0000	0007	0000	0000	0000	0002	0008	0007	0000	0003	0000
MEAN	0.194	0.268	0.080	11.445	1.913	0.022	0.201	0.140	3.93	0.327	0.700	0.310	0.136	0.845	0.603
S. D.	0.049	0.114	0.034	7.961	0.345	0.010	0.115	0.053	2.32	0.136	0.594	0.060	0.069	0.422	0.396
LOW	0.100	0.100	0.040	4.302	1.550	0.010	0.085	0.070	1.87	0.170	0.280	0.250	0.030	0.480	0.280
IGH	0.255	0.480	0.140	30.000	2.550	0.030	0.383	0.215	9.82	0.575	1.120	0.370	0.265	1.680	1.600

OLE, REX GLYPTOCEPHALUS ZACHIRUS 059006 AREA- CALIFORNIA SITE- B5 MUSCLE

LENGTH NUM 10 MEAN 0.345 S. D. 0.000 LOW 0.345 HIGH 0.345
WEIGHT NUM 10 MEAN 0.817 S. D. 0.000 LOW 0.817 HIGH 0.817

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0010	0008	0000	0000	0000
MEAN	0.298	0.618	0.085	6.869	2.137	0.031	0.103	0.228	3.92	0.177	0.000	0.235	0.137	0.593	0.500
S. D.	0.121	0.544	0.029	4.052	1.264	0.016	0.045	0.058	0.52	0.050	0.000	0.021	0.022	0.134	0.146
OW	0.150	0.130	0.050	2.500	0.900	0.010	0.060	0.180	3.25	0.100	0.000	0.220	0.110	0.400	0.380
IGH	0.490	1.810	0.150	15.400	5.450	0.060	0.190	0.360	5.00	0.240	0.000	0.250	0.170	0.750	0.780

SOLE, REX GLYPTOCEPHALUS ZACHIRUS 059006 AREA- PACIFIC NORTHWEST SITE- G9 MUSCLE

ENGTH NUM 10 MEAN 0.326 S. D. 0.007 LOW 0.315 HIGH 0.330
EIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0001	0000	0004	0000	0000	0006	0001	0000	0000	0002	0009	0008	0000	0001	0000
EAN	0.064	0.484	0.099	12.065	2.599	0.031	0.268	0.095	3.16	0.581	0.150	0.500	0.166	0.535	0.486
. D.	0.048	0.318	0.074	5.595	2.482	0.010	0.111	0.030	0.97	0.257	0.000	0.000	0.067	0.248	0.173
OW	0.020	0.190	0.030	7.380	1.425	0.020	0.125	0.055	2.14	0.210	0.000	0.500	0.070	0.310	0.310
IGH	0.180	1.050	0.240	23.590	9.615	0.040	0.400	0.160	4.69	0.930	0.150	0.500	0.270	1.000	0.750

SOLE, REX GLYPTOCEPHALUS ZACHIRUS 059006 AREA- PACIFIC NORTHWEST SITE- H8 MUSCLE

ENGTH NUM 1 MEAN 0.285 S. D. 0.000 LOW 0.285 HIGH 0.285
EIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
EAN	0.065	0.332	0.110	38.300	0.870	0.040	0.160	0.105	6.25	0.240	0.000	0.100	0.200	0.780	0.650
. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.065	0.332	0.110	38.300	0.870	0.040	0.160	0.105	6.25	0.240	0.000	0.100	0.200	0.780	0.650

SOLE, REX GLYPTOCEPHALUS ZACHIRUS 059006 AREA- PACIFIC NORTHWEST SITE- I7 MUSCLE

ENGTH NUM 1 MEAN 0.325 S. D. 0.000 LOW 0.325 HIGH 0.325
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0001	0001	0001	0000	0000	0001	0001	0001	0001	0001	0001	0001	0000	0001	0001
DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0001	0001	0000	0000	0000	0000
EAN	0.070	0.220	0.000	0.000	0.000	0.000	0.120	0.070	3.00	0.000	0.000	0.150	0.000	0.310	0.200
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.070	0.220	0.000	0.000	0.000	0.000	0.120	0.070	3.00	0.000	0.000	0.150	0.000	0.310	0.200

SOLE, REX GLYPTOCEPHALUS ZACHIRUS 059006 AREA- PACIFIC NORTHWEST SITE- M2 MUSCLE

LENGTH NUM 5 MEAN 0.285 S. D. 0.000 LOW 0.285 HIGH 0.285
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0005	0005	0005	0004	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0004
N DET.	0000	0000	0001	0000	0000	0002	0000	0000	0000	0002	0003	0003	0000	0001	0000
MEAN	0.109	0.504	0.078	11.371	0.803	0.043	0.493	0.178	3.28	0.248	0.200	0.350	0.200	0.918	0.795
S. D.	0.150	0.298	0.043	9.499	0.343	0.006	0.295	0.056	0.82	0.046	0.071	0.212	0.061	0.794	0.394
OW	0.030	0.200	0.050	3.900	0.485	0.040	0.287	0.110	2.11	0.195	0.150	0.200	0.125	0.130	0.570
IGH	0.375	0.925	0.140	25.200	1.290	0.050	1.000	0.250	4.29	0.280	0.250	0.500	0.290	2.000	1.385

REPORT

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

SOLE, REX GLYPTOCEPHALUS ZACHIRUS 059006 AREA- PACIFIC NORTHWEST SITE- M5 MUSCLE

LENGTH NUM 6 MEAN 0.332 S. D. 0.025 LOW 0.305 HIGH 0.360
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	00
N DET.	0000	0001	0000	0000	0000	0003	0001	0000	0000	0003	0006	0006	0000	0000	00
MEAN	0.073	0.329	0.052	8.763	1.935	0.035	0.267	0.114	4.24	0.362	0.000	0.000	0.211	0.700	0.5
S. D.	0.027	0.223	0.019	3.723	0.523	0.008	0.140	0.054	0.97	0.177	0.000	0.000	0.066	0.490	0.289
LOW	0.050	0.186	0.030	3.950	1.486	0.026	0.110	0.070	3.19	0.186	0.000	0.000	0.120	0.250	0.220
HIGH	0.120	0.703	0.080	15.000	2.920	0.040	0.415	0.206	5.38	0.540	0.000	0.000	0.290	1.630	1.000

SOLE, REX GLYPTOCEPHALUS ZACHIRUS 059006 AREA- PACIFIC NORTHWEST SITE- M8 MUSCLE

LENGTH NUM 4 MEAN 0.275 S. D. 0.012 LOW 0.265 HIGH 0.285
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	00
N DET.	0000	0000	0005	0000	0000	0004	0000	0002	0000	0002	0005	0005	0000	0002	00
MEAN	0.128	0.488	0.048	6.804	1.343	0.107	0.227	0.133	3.40	0.458	0.240	0.255	0.150	1.189	0.634
S. D.	0.060	0.430	0.011	2.524	0.298	0.070	0.094	0.065	1.71	0.337	0.156	0.078	0.105	0.846	0.209
LOW	0.050	0.100	0.040	2.740	0.930	0.040	0.150	0.040	1.79	0.170	0.130	0.200	0.040	0.325	0.3
HIGH	0.220	1.350	0.055	9.840	1.700	0.180	0.400	0.200	7.00	1.040	0.350	0.310	0.320	2.500	0.8

SOLE, REX GLYPTOCEPHALUS ZACHIRUS 059006 AREA- PACIFIC NORTHWEST SITE- N1 MUSCLE

LENGTH NUM 10 MEAN 0.298 S. D. 0.026 LOW 0.265 HIGH 0.350
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0004	0000	0000	0004	0000	0000	0000	0000	0007	0007	0000	0003	0000
MEAN	0.039	0.459	0.051	6.419	0.956	0.048	0.196	0.116	3.85	0.272	0.430	0.345	0.194	1.005	0.607
S. D.	0.021	0.229	0.013	1.252	0.488	0.013	0.185	0.041	1.18	0.149	0.295	0.407	0.059	0.380	0.2
LOW	0.010	0.175	0.040	3.500	0.586	0.030	0.083	0.055	2.55	0.110	0.130	0.100	0.070	0.360	0.3
HIGH	0.060	0.880	0.070	7.820	2.230	0.065	0.700	0.165	5.99	0.565	0.720	0.815	0.290	1.350	1.0

SOLE, REX GLYPTOCEPHALUS ZACHIRUS 059006 AREA- PACIFIC NORTHWEST SITE- R2 MUSCLE

LENGTH NUM 1 MEAN 0.285 S. D. 0.000 LOW 0.285 HIGH 0.285
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	000
MEAN	0.115	0.405	0.100	22.200	2.305	0.040	0.250	0.170	2.83	0.530	0.000	0.000	0.085	0.440	0.50
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.115	0.405	0.100	22.200	2.305	0.040	0.250	0.170	2.83	0.530	0.000	0.000	0.085	0.440	0.500

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- E8 MUSCLE

LENGTH NUM 8 MEAN 0.422 S. D. 0.107 LOW 0.295 HIGH 0.620
WEIGHT NUM 8 MEAN 0.766 S. D. 0.548 LOW 0.224 HIGH 1.592

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0007	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	000
N DET.	0003	0000	0000	0000	0000	0002	0002	0000	0000	0000	0005	0005	0000	0000	000
MEAN	0.084	0.484	0.058	17.284	0.409	0.030	0.077	0.231	3.48	0.185	0.150	0.217	0.169	0.491	0.37
S. D.	0.040	0.200	0.011	16.283	0.242	0.014	0.014	0.060	0.49	0.039	0.035	0.085	0.074	0.118	0.14
LOW	0.020	0.310	0.045	4.950	0.150	0.010	0.060	0.180	2.56	0.120	0.130	0.120	0.100	0.340	0.220
HIGH	0.120	0.880	0.080	47.733	0.890	0.050	0.095	0.360	4.17	0.240	0.190	0.280	0.310	0.630	0.640

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- I2 WHOLE

LENGTH NUM 1 MEAN 0.160 S. D. 0.000 LOW 0.160 HIGH 0.160
WEIGHT NUM 1 MEAN 0.027 S. D. 0.000 LOW 0.027 HIGH 0.027

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	000
MEAN	0.000	1.345	0.115	5.062	0.390	0.090	0.560	0.470	10.94	0.505	0.220	0.750	2.470	1.825	1.700
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	1.345	0.115	5.062	0.390	0.090	0.560	0.470	10.94	0.505	0.220	0.750	2.470	1.825	1.700

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- I2 MUSCLE

LENGTH NUM 7 MEAN 0.398 S. D. 0.051 LOW 0.343 HIGH 0.485
WEIGHT NUM 7 MEAN 0.602 S. D. 0.295 LOW 0.330 HIGH 1.114

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000	0007	0006	0000	0000	0000
MEAN	0.071	0.349	0.056	19.425	0.583	0.034	0.205	0.208	4.06	0.176	0.000	0.250	0.154	0.404	0.416
S. D.	0.031	0.114	0.013	11.532	0.288	0.009	0.272	0.110	0.85	0.037	0.000	0.000	0.032	0.225	0.069
LOW	0.025	0.190	0.030	8.100	0.250	0.020	0.060	0.060	3.31	0.150	0.000	0.000	0.110	0.060	0.310
HIGH	0.110	0.500	0.070	34.800	1.090	0.040	0.690	0.425	5.84	0.260	0.000	0.250	0.190	0.750	0.500

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- I3 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	9	0.382	0.108	0.238	0.630
WEIGHT	9	0.583	0.609	0.097	2.142

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0001	0000	0000	0000	0000	0004	0002	0000	0000	0000	0007	0007	0000	0001	0000
MEAN	0.123	0.447	0.053	11.369	0.586	0.033	0.149	0.208	3.73	0.234	0.085	0.315	0.204	0.611	0.393
S. D.	0.143	0.190	0.013	7.755	0.208	0.004	0.107	0.112	1.02	0.043	0.035	0.092	0.097	0.171	0.166
LOW	0.020	0.250	0.040	4.475	0.320	0.030	0.080	0.060	2.24	0.190	0.060	0.250	0.090	0.440	0.220
HIGH	0.430	0.810	0.080	29.930	0.920	0.040	0.376	0.440	5.31	0.320	0.110	0.380	0.386	0.940	0.690

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- J1 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	5	0.410	0.096	0.330	0.570
WEIGHT	5	0.854	0.924	0.342	2.497

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0001	0000	0000	0000	0000	0002	0000	0000	0000	0000	0005	0004	0000	0000	0000
MEAN	0.033	0.294	0.049	6.901	0.511	0.038	0.122	0.238	3.84	0.217	0.000	0.340	0.191	0.546	0.366
S. D.	0.013	0.148	0.005	2.188	0.175	0.004	0.043	0.064	0.49	0.036	0.000	0.000	0.077	0.091	0.084
LOW	0.020	0.090	0.040	3.965	0.200	0.033	0.075	0.180	3.25	0.190	0.000	0.000	0.100	0.410	0.250
HIGH	0.050	0.440	0.055	9.030	0.610	0.040	0.185	0.340	4.56	0.280	0.000	0.340	0.293	0.630	0.456

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- J5 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	3	0.453	0.076	0.370	0.520
WEIGHT	3	1.028	0.555	0.484	1.593

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0003	0000	0001	0000
MEAN	0.090	0.253	0.050	6.043	0.360	0.035	0.213	0.250	3.98	0.202	0.160	0.000	0.147	0.750	0.527
S. D.	0.057	0.033	0.020	3.080	0.289	0.005	0.153	0.085	1.31	0.114	0.000	0.000	0.038	0.269	0.146
LOW	0.050	0.220	0.030	3.120	0.030	0.030	0.080	0.170	2.50	0.080	0.000	0.000	0.120	0.560	0.360
HIGH	0.130	0.285	0.070	9.260	0.570	0.040	0.380	0.340	5.00	0.305	0.160	0.000	0.190	0.940	0.630

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- J7 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	4	0.488	0.119	0.355	0.600
WEIGHT	4	1.383	0.911	0.454	2.309

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0003	0004	0004	0004	0004	0004	0004	0004	0004	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0003	0000	0000	0000
MEAN	0.170	0.498	0.070	6.050	0.614	0.043	0.159	0.196	4.09	0.188	0.000	0.630	0.106	0.648	0.548
S. D.	0.110	0.106	0.020	3.595	0.159	0.012	0.061	0.042	1.10	0.039	0.000	0.000	0.056	0.228	0.260
LOW	0.060	0.380	0.055	2.256	0.430	0.030	0.125	0.150	3.12	0.150	0.000	0.000	0.045	0.310	0.360
HIGH	0.280	0.610	0.100	10.825	0.790	0.050	0.250	0.250	5.50	0.230	0.000	0.630	0.180	0.810	0.845

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- J8 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	5	0.368	0.112	0.261	0.550
WEIGHT	5	0.746	0.769	0.266	2.107

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0004	0000	0000	0000	0000	0001	0000	0000	0000	0000	0005	0005	0000	0000	0000
MEAN	0.080	0.263	0.092	5.385	0.516	0.028	0.102	0.228	3.69	0.210	0.000	0.000	0.144	0.688	0.444
S. D.	0.000	0.062	0.061	1.898	0.325	0.017	0.038	0.105	0.65	0.075	0.000	0.000	0.033	0.098	0.104
LOW	0.000	0.180	0.060	2.500	0.160	0.010	0.060	0.140	2.63	0.110	0.000	0.000	0.100	0.560	0.310
HIGH	0.080	0.310	0.200	7.050	1.000	0.050	0.130	0.380	4.38	0.310	0.000	0.000	0.190	0.810	0.560

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- J9 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	7	0.381	0.083	0.260	0.500
WEIGHT	7	0.664	0.458	0.152	1.509

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0005	0007	0007	0005	0007	0007	0007	0007	0007
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0005	0000	0000	0000
MEAN	0.056	0.302	0.062	6.721	0.437	0.029	0.111	0.303	4.12	0.260	0.375	0.315	0.179	0.586	0.441
S. D.	0.020	0.083	0.022	2.414	0.131	0.004	0.040	0.273	1.05	0.162	0.262	0.092	0.088	0.175	0.092
LOW	0.040	0.200	0.040	2.800	0.300	0.020	0.060	0.130	3.31	0.140	0.190	0.250	0.115	0.405	0.305
HIGH	0.080	0.440	0.100	10.020	0.645	0.035	0.156	0.810	5.88	0.540	0.560	0.380	0.370	0.810	0.560

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- K2 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	8	0.442	0.094	0.309	0.570
WEIGHT	9	1.032	0.660	0.248	2.043

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0003	0000	0001	0000	0000	0002	0000	0000	0000	0000	0008	0008	0000	0000	0000
MEAN	0.053	0.390	0.051	14.332	0.686	0.037	0.190	0.168	3.54	0.191	0.130	0.190	0.171	0.542	0.441
S. D.	0.020	0.149	0.015	8.024	0.326	0.011	0.215	0.038	0.43	0.041	0.000	0.000	0.085	0.176	0.130
LOW	0.040	0.190	0.036	3.425	0.233	0.020	0.060	0.123	3.06	0.130	0.000	0.000	0.100	0.270	0.280
HIGH	0.090	0.690	0.080	24.400	1.220	0.050	0.690	0.230	4.25	0.260	0.130	0.190	0.360	0.810	0.690

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- K4 MUSCLE

LENGTH NUM 9 MEAN 0.576 S. D. 0.099 LOW 0.347 HIGH 0.700
WEIGHT NUM 9 MEAN 2.379 S. D. 0.918 LOW 0.393 HIGH 3.614

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0008	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0001	0000	0000	0000	0000	0002	0000	0000	0000	0000	0009	0007	0000	0000	0001
MEAN	0.091	0.416	0.054	12.261	0.457	0.030	0.082	0.181	3.90	0.181	0.000	0.380	0.120	0.436	0.30
S. D.	0.090	0.104	0.013	11.675	0.290	0.016	0.043	0.042	1.11	0.028	0.000	0.000	0.034	0.111	0.02
LOW	0.020	0.250	0.030	3.500	0.175	0.010	0.060	0.130	2.81	0.140	0.000	0.380	0.090	0.310	0.190
HIGH	0.300	0.560	0.070	31.175	1.120	0.060	0.190	0.270	6.50	0.230	0.000	0.380	0.190	0.640	0.450

PLAICE, AMERICAN (DAB) HIPPOGLOSSOIDES PLATESSOIDES 059008 AREA- NORTH ATLANTIC SITE- P2 MUSCLE

LENGTH NUM 2 MEAN 0.346 S. D. 0.058 LOW 0.305 HIGH 0.387
WEIGHT NUM 2 MEAN 0.760 S. D. 0.474 LOW 0.424 HIGH 1.095

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	00
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.090	0.410	0.068	4.500	0.433	0.050	0.190	0.170	3.85	0.210	0.000	0.330	0.213	0.533	0.50
S. D.	0.071	0.042	0.004	1.202	0.110	0.014	0.000	0.000	0.40	0.000	0.000	0.000	0.138	0.046	0.156
LOW	0.040	0.380	0.065	3.650	0.355	0.040	0.000	0.000	3.56	0.210	0.000	0.000	0.115	0.500	0.470
HIGH	0.140	0.440	0.070	5.350	0.510	0.060	0.190	0.170	4.13	0.210	0.000	0.330	0.310	0.565	0.690

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- G9 MUSCLE

LENGTH NUM 10 MEAN 1.020 S. D. 0.186 LOW 0.650 HIGH 1.190
WEIGHT NUM 10 MEAN 16.150 S. D. 6.895 LOW 3.629 HIGH 22.680

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0008	0008	0010	0010	0010	0009	0010	0010	0010	0010	0010	00
N DET.	0000	0001	0006	0000	0000	0008	0001	0001	0000	0001	0009	0009	0001	0004	0000
MEAN	0.179	0.324	0.035	3.157	0.902	0.035	0.188	0.152	3.26	0.273	0.050	0.100	0.095	0.963	0.539
S. D.	0.123	0.101	0.010	1.049	0.374	0.007	0.084	0.072	0.59	0.169	0.000	0.000	0.064	0.397	0.194
LOW	0.010	0.200	0.020	1.790	0.425	0.030	0.070	0.040	2.40	0.070	0.000	0.000	0.040	0.600	0.25
HIGH	0.380	0.525	0.040	4.830	1.630	0.040	0.320	0.270	4.28	0.610	0.050	0.100	0.250	1.630	0.82

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- G9 LIVER

LENGTH NUM 3 MEAN 1.101 S. D. 0.035 LOW 1.072 HIGH 1.140
WEIGHT NUM 3 MEAN 18.871 S. D. 3.474 LOW 15.876 HIGH 22.680

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0002	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0002	0000	0000	0000	0000	0002	0000	0000	0000	0000	0002	0003	0000	0001	0000
MEAN	0.040	0.447	1.000	16.975	1.525	0.020	0.257	4.137	27.60	0.177	0.130	0.000	0.570	0.615	0.490
S. D.	0.000	0.237	0.618	5.480	0.629	0.000	0.070	0.803	6.11	0.083	0.000	0.000	0.157	0.460	0.489
LOW	0.000	0.250	0.580	13.100	1.080	0.000	0.190	3.210	22.50	0.110	0.000	0.000	0.390	0.290	0.229
HIGH	0.040	0.710	1.710	20.850	1.970	0.020	0.330	4.630	34.38	0.270	0.130	0.000	0.680	0.940	1.00

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- H8 MUSCLE

LENGTH NUM 6 MEAN 1.043 S. D. 0.135 LOW 0.880 HIGH 1.210
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0005	0005	0006	0006	0006	0006	0006	0006	0006	0006	0006	0005
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0005	0000	0000	0001
MEAN	0.306	0.532	0.093	1.358	0.943	0.065	0.244	0.287	3.03	0.243	0.133	0.620	0.089	0.969	0.600
S. D.	0.157	0.252	0.049	0.378	0.373	0.032	0.197	0.071	0.35	0.076	0.102	0.000	0.042	0.316	0.085
LOW	0.075	0.250	0.060	0.850	0.513	0.020	0.110	0.210	2.37	0.170	0.060	0.000	0.045	0.560	0.500
HIGH	0.570	1.000	0.180	1.820	1.360	0.110	0.630	0.370	3.37	0.365	0.250	0.620	0.150	1.380	0.720

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- I7 MUSCLE

LENGTH NUM 2 MEAN 1.095 S. D. 0.064 LOW 1.050 HIGH 1.140
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000
MEAN	0.233	0.190	0.110	3.208	1.595	0.085	0.083	0.243	5.00	0.290	0.000	0.140	0.103	1.140	0.590
S. D.	0.244	0.000	0.085	1.389	1.245	0.035	0.018	0.152	1.41	0.141	0.000	0.113	0.011	0.240	0.13
LOW	0.060	0.190	0.050	2.225	0.715	0.060	0.070	0.135	4.00	0.190	0.000	0.060	0.095	0.970	0.500
HIGH	0.405	0.190	0.170	4.190	2.475	0.110	0.095	0.350	6.00	0.390	0.000	0.220	0.110	1.310	0.685

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- I7 LIVER

LENGTH NUM 1 MEAN 1.050 S. D. 0.000 LOW 1.050 HIGH 1.050
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.240	0.810	6.130	1.950	3.150	0.050	0.340	4.940	22.44	0.220	0.630	0.310	1.030	0.750	0.750
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.240	0.810	6.130	1.950	3.150	0.050	0.340	4.940	22.44	0.220	0.630	0.310	1.030	0.750	0.750

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- M5 MUSCLE

LENGTH	NUM	3	MEAN	0.913	S. D.	0.023	LOW	0.900	HIGH 0.940
WEIGHT	NUM	3	MEAN	12.096	S. D.	0.262	LOW	11.794	HIGH 12.247

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.857	0.418	0.112	2.124	1.123	0.040	0.140	0.195	3.57	0.255	0.310	0.200	0.098	1.210	0.720
S. D.	0.388	0.143	0.072	1.136	1.098	0.000	0.070	0.078	0.97	0.094	0.000	0.000	0.067	0.182	0.452
LOW	0.435	0.275	0.070	1.100	0.440	0.000	0.060	0.105	2.60	0.180	0.000	0.000	0.050	1.000	0.340
HIGH	1.200	0.560	0.195	3.346	2.390	0.040	0.186	0.245	4.54	0.360	0.310	0.200	0.175	1.315	1.220

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- M5 LIVER

LENGTH	NUM	2	MEAN	0.920	S. D.	0.028	LOW	0.900	HIGH 0.940
WEIGHT	NUM	2	MEAN	12.021	S. D.	0.320	LOW	11.794	HIGH 12.247

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.890	0.310	0.940	3.188	1.120	0.030	0.045	2.380	14.26	0.190	0.090	0.185	0.775	0.735	0.750
S. D.	0.127	0.000	0.608	1.361	0.212	0.014	0.021	0.000	1.59	0.085	0.000	0.177	0.304	0.106	0.000
LOW	0.800	0.310	0.510	2.225	0.970	0.020	0.030	0.000	13.13	0.130	0.000	0.060	0.560	0.660	0.000
HIGH	0.980	0.310	1.370	4.150	1.270	0.040	0.060	2.380	15.38	0.250	0.090	0.310	0.990	0.810	0.750

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- M6 MUSCLE

LENGTH	NUM	2	MEAN	0.840	S. D.	0.071	LOW	0.790	HIGH 0.890
WEIGHT	NUM	2	MEAN	8.845	S. D.	1.604	LOW	7.711	HIGH 9.979

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.478	0.458	0.048	1.678	0.990	0.053	0.341	0.190	2.31	0.240	0.620	0.280	0.085	0.818	0.723
S. D.	0.004	0.102	0.011	1.078	0.240	0.018	0.182	0.014	0.21	0.170	0.000	0.000	0.007	0.308	0.435
LOW	0.475	0.386	0.040	0.915	0.820	0.040	0.212	0.180	2.16	0.120	0.000	0.000	0.080	0.600	0.415
HIGH	0.480	0.530	0.055	2.440	1.160	0.065	0.470	0.200	2.46	0.360	0.620	0.280	0.090	1.036	1.030

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- M6 LIVER

LENGTH	NUM	2	MEAN	0.840	S. D.	0.071	LOW	0.790	HIGH 0.890
WEIGHT	NUM	2	MEAN	8.849	S. D.	1.599	LOW	7.718	HIGH 9.979

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.240	0.405	1.705	1.850	2.280	0.035	0.120	3.500	16.88	0.235	0.155	0.190	0.545	0.895	0.630
S. D.	0.042	0.134	0.799	0.000	0.000	0.007	0.085	3.889	7.95	0.035	0.092	0.000	0.120	0.332	0.000
LOW	0.210	0.310	1.140	0.000	0.000	0.030	0.060	0.750	11.25	0.210	0.090	0.000	0.460	0.660	0.000
HIGH	0.270	0.500	2.270	1.850	2.280	0.040	0.180	6.250	22.50	0.260	0.220	0.190	0.630	1.130	0.630

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- M9 MUSCLE

LENGTH	NUM	1	MEAN	0.918	S. D.	0.000	LOW	0.918	HIGH 0.918
WEIGHT	NUM	1	MEAN	9.526	S. D.	0.000	LOW	9.526	HIGH 9.526

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.975	0.180	0.130	2.515	2.070	0.050	0.140	0.245	6.00	0.160	0.000	0.380	0.115	0.560	1.060
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.975	0.180	0.130	2.515	2.070	0.050	0.140	0.245	6.00	0.160	0.000	0.380	0.115	0.560	1.060

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- R2 MUSCLE

LENGTH	NUM	2	MEAN	0.599	S. D.	0.027	LOW	0.580	HIGH 0.618
WEIGHT	NUM	2	MEAN	2.268	S. D.	0.000	LOW	2.268	HIGH 2.268

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.125	0.428	0.085	3.282	0.848	0.050	0.251	0.348	5.81	0.335	0.000	0.380	0.128	0.803	0.735
S. D.	0.049	0.202	0.035	0.359	0.067	0.000	0.064	0.046	0.84	0.205	0.000	0.000	0.004	0.053	0.403
LOW	0.090	0.285	0.060	3.028	0.800	0.000	0.205	0.315	5.21	0.190	0.000	0.000	0.125	0.765	0.450
HIGH	0.160	0.570	0.110	3.536	0.895	0.050	0.296	0.380	6.40	0.480	0.000	0.380	0.130	0.840	1.020

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- PACIFIC NORTHWEST SITE- R5 MUSCLE

LENGTH	NUM	1	MEAN.	0.759	S. D.	0.000	LOW	0.759	HIGH 0.759
WEIGHT	NUM	1	MEAN	6.350	S. D.	0.000	LOW	6.350	HIGH 6.350

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0001	0001	0000	0000	0001	0001	0000	0000	0001	0001	0001	0000	0001	0000
MEAN	0.320	0.000	0.000	2.500	0.970	0.000	0.000	0.250	5.36	0.000	0.000	0.000	0.110	0.000	0.950
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.320	0.000	0.000	2.500	0.970	0.000	0.000	0.250	5.36	0.000	0.000	0.000	0.110	0.000	0.950

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

REPORT MF1

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- ALASKA SITE- N6 MUSCLE

LENGTH	NUM	10	MEAN	0.900	S. D.	0.122	LOW	0.735	HIGH	1.090
WEIGHT	NUM	10	MEAN	8.947	S. D.	3.784	LOW	4.309	HIGH	15.876

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0007	0000	0000	0000
MEAN	0.062	0.455	0.059	2.585	0.456	0.042	0.231	0.368	4.48	0.217	0.299	0.290	0.119	0.663	0.551
S. D.	0.037	0.277	0.019	1.778	0.212	0.018	0.099	0.474	0.63	0.046	0.273	0.293	0.046	0.164	0.171
LOW	0.030	0.130	0.025	1.300	0.110	0.020	0.130	0.115	3.37	0.165	0.060	0.060	0.070	0.440	0.370
HIGH	0.110	1.130	0.090	7.433	0.720	0.080	0.440	1.690	5.56	0.310	0.740	0.620	0.200	0.880	0.880

HALIBUT, PAC. HIPPOGLOSSUS STENOLEPIS 059011 AREA- ALASKA SITE- N6 LIVER

LENGTH	NUM	8	MEAN	0.940	S. D.	0.098	LOW	0.780	HIGH	1.090
WEIGHT	NUM	8	MEAN	10.107	S. D.	3.275	LOW	5.443	HIGH	15.876

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0006	0008	0008	0008	0008	0007	0008	0008	0008	0008	0008
N DET.	0006	0000	0000	0000	0000	0003	0000	0000	0000	0000	0003	0007	0000	0000	0000
MEAN	0.025	0.609	2.036	4.621	1.652	0.032	0.285	4.038	27.97	0.153	0.238	0.310	0.680	0.553	0.391
S. D.	0.007	0.337	1.494	4.383	0.498	0.015	0.201	3.123	10.40	0.053	0.034	0.000	0.215	0.212	0.182
LOW	0.020	0.310	0.310	0.100	0.990	0.010	0.120	0.990	17.25	0.100	0.190	0.000	0.420	0.310	0.190
HIGH	0.030	1.310	4.800	13.300	2.250	0.050	0.630	10.500	46.88	0.260	0.280	0.310	1.060	0.860	0.750

SOLE, ROCK LEPIDOPSETTA BILINEATA 059014 AREA- PACIFIC NORTHWEST SITE- I7 MUSCLE

LENGTH	NUM	10	MEAN	0.390	S. D.	0.000	LOW	0.390	HIGH	0.390
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0001	0000	0001	0000	0000	0000	0005	0006	0001	0001	0000
MEAN	0.112	0.420	0.067	5.501	1.126	0.042	0.158	0.202	3.20	0.214	0.237	0.239	0.143	0.918	0.530
S. D.	0.061	0.132	0.029	1.736	0.529	0.020	0.058	0.074	0.92	0.050	0.202	0.153	0.041	0.459	0.129
LOW	0.020	0.250	0.010	2.250	0.530	0.020	0.060	0.130	0.81	0.135	0.095	0.075	0.095	0.280	0.310
HIGH	0.210	0.625	0.110	8.110	1.835	0.076	0.250	0.310	4.31	0.300	0.590	0.440	0.210	1.750	0.750

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- J6 MUSCLE

LENGTH	NUM	1	MEAN	0.510	S. D.	0.000	LOW	0.510	HIGH	0.510
WEIGHT	NUM	1	MEAN	1.475	S. D.	0.000	LOW	1.475	HIGH	1.475

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.000	0.440	0.040	8.150	0.780	0.000	0.090	0.130	6.50	0.130	0.000	0.440	0.040	0.440	0.220
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.440	0.040	8.150	0.780	0.000	0.090	0.130	6.50	0.130	0.000	0.440	0.040	0.440	0.220

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- J8 MUSCLE

LENGTH	NUM	8	MEAN	0.331	S. D.	0.061	LOW	0.250	HIGH	0.437
WEIGHT	NUM	8	MEAN	0.447	S. D.	0.233	LOW	0.188	HIGH	0.828

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0007	0000	0000	0000
MEAN	0.020	0.519	0.053	3.525	0.571	0.041	0.251	0.206	5.56	0.193	0.155	0.130	0.154	0.599	0.441
S. D.	0.000	0.173	0.016	1.305	0.218	0.015	0.219	0.068	0.55	0.059	0.049	0.000	0.050	0.189	0.209
LOW	0.020	0.370	0.030	2.090	0.245	0.020	0.125	0.090	4.74	0.130	0.120	0.000	0.060	0.220	0.190
HIGH	0.020	0.810	0.075	5.792	0.980	0.060	0.690	0.310	6.56	0.315	0.190	0.130	0.205	0.785	0.810

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- J9 MUSCLE

LENGTH	NUM	10	MEAN	0.353	S. D.	0.037	LOW	0.293	HIGH	0.420
WEIGHT	NUM	10	MEAN	0.432	S. D.	0.143	LOW	0.228	HIGH	0.709

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0008	0007	0000	0000	0000
MEAN	0.099	0.449	0.062	5.152	0.456	0.040	0.176	0.399	5.16	0.218	0.100	0.190	0.183	0.713	0.506
S. D.	0.095	0.171	0.023	2.378	0.226	0.015	0.106	0.615	2.15	0.056	0.028	0.131	0.053	0.122	0.120
LOW	0.020	0.130	0.040	2.212	0.130	0.020	0.060	0.060	1.44	0.150	0.080	0.040	0.070	0.500	0.300
HIGH	0.299	0.690	0.105	10.050	0.906	0.060	0.375	2.125	9.44	0.320	0.120	0.280	0.270	0.880	0.690

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- K4 MUSCLE

LENGTH	NUM	3	MEAN	0.327	S. D.	0.125	LOW	0.236	HIGH	0.470
WEIGHT	NUM	3	MEAN	0.442	S. D.	0.519	LOW	0.110	HIGH	1.040

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0002	0000
MEAN	0.045	0.377	0.070	8.327	0.527	0.033	0.240	0.408	5.01	0.263	0.000	0.290	0.135	0.630	0.523
S. D.	0.000	0.003	0.022	7.465	0.253	0.008	0.096	0.409	0.29	0.034	0.000	0.000	0.035	0.000	0.085
LOW	0.000	0.375	0.045	2.625	0.245	0.025	0.130	0.150	4.81	0.225	0.000	0.000	0.095	0.000	0.440
HIGH	0.045	0.380	0.085	16.776	0.735	0.040	0.310	0.880	5.34	0.290	0.000	0.290	0.160	0.630	0.610

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

LENGTH	NUM	12	MEAN	0.310	S. D.	0.022	LOW	0.280	HIGH	0.357
WEIGHT	NUM	12	MEAN	0.239	S. D.	0.057	LOW	0.157	HIGH	0.336

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0012	0012	0012	0012	0012	0011	0012	0012	0012	0012	0012	0012	0012	0012
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0008	0000	0000	0000
MEAN	0.093	0.386	0.046	9.273	0.783	0.030	0.157	0.270	5.48	0.227	0.186	0.115	0.163	0.620	0.507
S. D.	0.058	0.174	0.015	4.718	0.380	0.016	0.107	0.092	1.39	0.054	0.107	0.110	0.040	0.149	0.222
LOW	0.020	0.130	0.020	3.766	0.200	0.010	0.060	0.095	2.81	0.130	0.060	0.060	0.110	0.310	0.280
HIGH	0.225	0.625	0.075	19.950	1.600	0.075	0.440	0.500	8.47	0.300	0.310	0.280	0.240	0.765	1.100

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- O1 MUSCLE

LENGTH	NUM	30	MEAN	0.331	S. D.	0.036	LOW	0.264	HIGH	0.373
WEIGHT	NUM	29	MEAN	0.349	S. D.	0.135	LOW	0.160	HIGH	0.518

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0030	0029	0030	0030	0029	0030	0030	0030	0029	0030	0030	0030	0030	0030	0029
N DET.	0001	0000	0000	0000	0000	0008	0000	0000	0000	0000	0026	0023	0000	0000	0000
MEAN	0.108	0.462	0.073	7.276	0.650	0.034	0.170	0.613	5.23	0.230	0.300	0.349	0.189	0.642	0.519
S. D.	0.078	0.253	0.040	4.142	0.182	0.015	0.095	0.558	0.98	0.097	0.216	0.237	0.046	0.208	0.216
LOW	0.020	0.130	0.020	1.500	0.320	0.010	0.045	0.120	3.40	0.080	0.155	0.190	0.060	0.310	0.020
HIGH	0.310	1.190	0.200	18.230	0.940	0.080	0.435	2.060	8.38	0.560	0.620	0.750	0.290	1.130	1.060

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- O1 LIVER

LENGTH	NUM	1	MEAN	0.373	S. D.	0.000	LOW	0.373	HIGH	0.373
WEIGHT	NUM	1	MEAN	0.518	S. D.	0.000	LOW	0.518	HIGH	0.518

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0000	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0001	0000
MEAN	0.000	0.990	0.500	0.000	0.000	0.000	0.155	3.390	51.43	0.530	0.000	0.200	2.860	0.000	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.990	0.500	0.000	0.000	0.000	0.155	3.390	51.43	0.530	0.000	0.200	2.860	0.000	0.380

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- O3 MUSCLE

LENGTH	NUM	19	MEAN	0.350	S. D.	0.042	LOW	0.280	HIGH	0.442
WEIGHT	NUM	19	MEAN	0.361	S. D.	0.145	LOW	0.053	HIGH	0.635

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0003	0000	0000	0000	0000	0004	0000	0000	0000	0000	0017	0015	0000	0001	0000
MEAN	0.039	0.382	0.068	7.678	0.814	0.044	0.154	0.245	4.71	0.231	0.207	0.134	0.162	0.747	0.510
S. D.	0.027	0.185	0.036	4.069	0.523	0.041	0.109	0.072	0.99	0.073	0.042	0.083	0.045	0.226	0.167
LOW	0.010	0.130	0.030	2.825	0.330	0.020	0.060	0.135	3.05	0.110	0.160	0.060	0.060	0.310	0.160
HIGH	0.105	1.060	0.150	20.275	2.700	0.190	0.560	0.390	6.44	0.445	0.240	0.250	0.290	1.250	0.780

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- O3 LIVER

LENGTH	NUM	1	MEAN	0.340	S. D.	0.000	LOW	0.340	HIGH	0.340
WEIGHT	NUM	1	MEAN	0.370	S. D.	0.000	LOW	0.370	HIGH	0.370

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	1.000	0.290	2.900	2.070	0.000	0.360	1.820	22.86	0.360	0.380	0.350	0.960	1.050	0.450
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	1.000	0.290	2.900	2.070	0.000	0.360	1.820	22.86	0.360	0.380	0.350	0.960	1.050	0.450

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- P1 MUSCLE

LENGTH	NUM	3	MEAN	0.392	S. D.	0.060	LOW	0.340	HIGH	0.458
WEIGHT	NUM	3	MEAN	0.664	S. D.	0.404	LOW	0.345	HIGH	1.118

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0000	0000
MEAN	0.020	0.290	0.082	3.454	0.527	0.028	0.298	0.365	5.61	0.210	0.285	0.440	0.140	0.728	0.595
S. D.	0.000	0.092	0.053	0.461	0.191	0.003	0.067	0.498	1.64	0.026	0.134	0.000	0.062	0.124	0.135
LOW	0.000	0.190	0.020	2.925	0.350	0.025	0.250	0.060	4.50	0.180	0.190	0.000	0.070	0.595	0.500
HIGH	0.020	0.370	0.115	3.775	0.730	0.030	0.345	0.940	7.50	0.230	0.380	0.440	0.190	0.840	0.750

FLOUNDER, YELLOWTAIL LIMANDA FERRUGINEA 059016 AREA- NORTH ATLANTIC SITE- S7 MUSCLE

LENGTH	NUM	2	MEAN	0.280	S. D.	0.002	LOW	0.278	HIGH	0.281
WEIGHT	NUM	2	MEAN	0.187	S. D.	0.006	LOW	0.182	HIGH	0.191

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.043	0.260	0.098	11.330	1.015	0.010	0.156	0.275	6.34	0.288	0.120	0.440	0.303	0.940	0.603
S. D.	0.018	0.000	0.060	5.558	0.177	0.000	0.062	0.141	1.90	0.202	0.000	0.000	0.103	0.000	0.074
LOW	0.030	0.260	0.055	7.400	0.890	0.000	0.112	0.175	4.99	0.145	0.000	0.000	0.230	0.000	0.550
HIGH	0.055	0.260	0.140	15.260	1.140	0.010	0.200	0.375	7.68	0.430	0.120	0.440	0.375	0.940	0.655

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SOLE, DOVER MICROSTOMUS PACIFICUS 059021 AREA- CALIFORNIA SITE- B2 MUSCLE

LENGTH NUM 10 MEAN 0.420 S. D. 0.033 LOW 0.378 HIGH 0.480
WEIGHT NUM 10 MEAN 0.740 S. D. 0.174 LOW 0.520 HIGH 1.068

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0000	0002	0000	0000	0003	0001	0000	0000	0000	0010	0009	0000	0002	0000
MEAN	0.120	0.390	0.081	4.381	1.033	0.027	0.158	0.200	3.58	0.291	0.000	0.600	0.154	0.515	0.363
S. D.	0.069	0.219	0.043	2.449	0.284	0.016	0.085	0.073	0.67	0.130	0.000	0.000	0.096	0.278	0.101
LOW	0.030	0.050	0.040	1.550	0.610	0.010	0.053	0.075	2.50	0.135	0.000	0.000	0.030	0.060	0.190
HIGH	0.230	0.750	0.180	9.250	1.530	0.040	0.305	0.300	4.48	0.565	0.000	0.600	0.360	0.940	0.525

SOLE, DOVER MICROSTOMUS PACIFICUS 059021 AREA- CALIFORNIA SITE- B9 MUSCLE

LENGTH NUM 10 MEAN 0.393 S. D. 0.031 LOW 0.351 HIGH 0.444
WEIGHT NUM 10 MEAN 0.530 S. D. 0.129 LOW 0.334 HIGH 0.725

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0008	0008	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010
N DET.	0000	0001	0000	0000	0000	0006	0001	0001	0000	0000	0009	0007	0000	0003	0000
MEAN	0.116	0.569	0.076	9.256	1.277	0.048	0.225	0.205	4.06	0.254	0.190	0.297	0.166	0.931	0.470
S. D.	0.043	0.326	0.049	4.027	0.430	0.022	0.086	0.043	1.71	0.092	0.000	0.145	0.096	0.407	0.136
LOW	0.060	0.200	0.030	3.800	0.780	0.020	0.100	0.110	2.59	0.070	0.000	0.150	0.070	0.480	0.250
HIGH	0.200	1.130	0.180	14.563	1.875	0.070	0.320	0.250	8.00	0.360	0.190	0.440	0.340	1.630	0.750

SOLE, DOVER MICROSTOMUS PACIFICUS 059021 AREA- CALIFORNIA SITE- B9 LIVER

LENGTH NUM 1 MEAN 0.390 S. D. 0.000 LOW 0.390 HIGH 0.390
WEIGHT NUM 1 MEAN 0.507 S. D. 0.000 LOW 0.507 HIGH 0.507

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.210	0.480	2.000	6.560	2.610	0.040	0.375	2.500	22.86	0.890	0.130	0.430	1.000	0.000	0.450
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.210	0.480	2.000	6.560	2.610	0.040	0.375	2.500	22.86	0.890	0.130	0.430	1.000	0.000	0.450

SOLE, DOVER MICROSTOMUS PACIFICUS 059021 AREA- CALIFORNIA SITE- F4 MUSCLE

LENGTH NUM 10 MEAN 0.354 S. D. 0.010 LOW 0.331 HIGH 0.365
WEIGHT NUM 10 MEAN 0.467 S. D. 0.039 LOW 0.403 HIGH 0.524

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0003	0000	0004	0000	0000	0006	0001	0000	0000	0000	0009	0009	0001	0000	0000
MEAN	0.026	0.551	0.069	5.689	0.668	0.031	0.186	0.130	4.35	0.330	0.350	0.350	0.172	0.695	0.518
S. D.	0.014	0.304	0.042	2.984	0.213	0.020	0.167	0.037	1.28	0.234	0.000	0.000	0.118	0.520	0.319
LOW	0.010	0.210	0.030	2.025	0.290	0.010	0.020	0.080	2.80	0.110	0.000	0.000	0.030	0.200	0.200
HIGH	0.050	1.250	0.150	9.325	0.975	0.055	0.530	0.180	6.77	0.670	0.350	0.350	0.390	1.630	1.100

SOLE, DOVER MICROSTOMUS PACIFICUS 059021 AREA- PACIFIC NORTHWEST SITE- G9 MUSCLE

LENGTH NUM 9 MEAN 0.437 S. D. 0.008 LOW 0.415 HIGH 0.440
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0008	0008	0009	0009	0009	0009	0009	0008	0008	0009	0009	0008
N DET.	0000	0001	0002	0000	0000	0003	0001	0000	0000	0001	0006	0004	0000	0003	0000
MEAN	0.111	0.485	0.069	6.805	0.976	0.034	0.223	0.158	3.94	0.292	0.255	0.383	0.159	1.180	0.531
S. D.	0.052	0.186	0.058	0.956	0.169	0.013	0.182	0.090	1.64	0.187	0.134	0.249	0.107	0.421	0.159
LOW	0.060	0.250	0.010	5.556	0.805	0.010	0.080	0.040	1.91	0.040	0.160	0.200	0.085	0.756	0.350
HIGH	0.230	0.755	0.180	8.000	1.250	0.046	0.510	0.325	7.86	0.550	0.350	0.750	0.430	1.930	0.750

SOLE, DOVER MICROSTOMUS PACIFICUS 059021 AREA- PACIFIC NORTHWEST SITE- G9 LIVER

LENGTH NUM 2 MEAN 0.415 S. D. 0.000 LOW 0.415 HIGH 0.415
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	0.270	0.595	2.333	4.200	3.070	0.055	0.183	3.083	19.71	0.350	0.145	2.630	0.690	0.565	0.570
S. D.	0.042	0.071	0.272	0.000	0.000	0.000	0.018	0.392	7.48	0.014	0.120	0.000	0.339	0.000	0.170
LOW	0.240	0.545	2.140	0.000	0.000	0.000	0.170	2.805	14.42	0.340	0.060	0.000	0.450	0.000	0.450
HIGH	0.300	0.645	2.525	4.200	3.070	0.055	0.195	3.360	25.00	0.360	0.230	2.630	0.930	0.565	0.690

SOLE, DOVER MICROSTOMUS PACIFICUS 059021 AREA- PACIFIC NORTHWEST SITE- H8 MUSCLE

LENGTH NUM 2 MEAN 0.380 S. D. 0.000 LOW 0.380 HIGH 0.380
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0001	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.035	0.841	0.285	8.953	0.665	0.040	0.353	0.453	3.86	0.368	0.000	0.000	0.106	1.205	0.535
S. D.	0.021	0.324	0.304	0.000	0.035	0.000	0.117	0.364	0.91	0.031	0.000	0.000	0.000	0.417	0.049
LOW	0.020	0.612	0.070	0.000	0.640	0.000	0.270	0.195	3.21	0.346	0.000	0.000	0.000	0.910	0.500
HIGH	0.050	1.070	0.500	8.953	0.690	0.040	0.435	0.710	4.50	0.390	0.000	0.000	0.106	1.500	0.570

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                                       TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                    REPORT   MF17
                                      IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                     BY TISSUE AND LOCATION

 SOLE, DOVER                     MICROSTOMUS PACIFICUS              059021   AREA- PACIFIC NORTHWEST   SITE- M1   MUSCLE

LENGTH      NUM    1   MEAN         0.445   S. D.      0.000   LOW       0.445   HIGH        0.445
WEIGHT      NUM    0   MEAN         0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0000
N DET.      0001    0000    0001    0000    0000    0001    0000    0000    0000    0000    0001    0000    0000    0000    0000
MEAN       0.000   0.750   0.000  10.600   1.420   0.000   0.750   0.040    1.79   0.360   0.000   1.130   0.180   0.940   0.000
S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH       0.000   0.750   0.000  10.600   1.420   0.000   0.750   0.040    1.79   0.360   0.000   1.130   0.180   0.940   0.000

 SOLE, DOVER                     MICROSTOMUS PACIFICUS              059021   AREA- PACIFIC NORTHWEST   SITE- M5   MUSCLE

LENGTH      NUM    9   MEAN         0.419   S. D.      0.019   LOW       0.395   HIGH        0.435
WEIGHT      NUM    0   MEAN         0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER      0011    0010    0011    0011    0011    0011    0011    0011    0011    0011    0011    0011    0011    0011    0011
N DET.      0000    0000    0002    0000    0000    0004    0002    0001    0000    0001    0009    0006    0001    0004    0000
MEAN       0.170   0.582   0.067   9.508   2.011   0.035   0.191   0.210    3.72   0.240   0.180   0.376   0.128   0.881   0.523
S. D.      0.085   0.288   0.036   5.360   1.033   0.020   0.091   0.132    1.45   0.164   0.240   0.236   0.040   0.284   0.206
LOW        0.083   0.150   0.020   2.240   1.020   0.010   0.040   0.080    2.14   0.070   0.010   0.070   0.055   0.380   0.150
HIGH       0.395   1.050   0.140  17.850   4.000   0.070   0.333   0.560    6.36   0.460   0.350   0.630   0.180   1.290   0.800

 SOLE, DOVER                     MICROSTOMUS PACIFICUS              059021   AREA- PACIFIC NORTHWEST   SITE- M8   MUSCLE

LENGTH      NUM    2   MEAN         0.385   S. D.      0.000   LOW       0.385   HIGH        0.385
WEIGHT      NUM    0   MEAN         0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER      0002    0002    0002    0001    0001    0002    0002    0002    0001    0002    0002    0002    0002    0002    0002
N DET.      0000    0000    0001    0000    0000    0001    0000    0000    0000    0000    0001    0001    0000    0001    0000
MEAN       0.125   0.140   0.050   5.835   0.790   0.040   0.253   0.145    1.81   0.475   0.880   1.410   0.100   1.250   0.655
S. D.      0.035   0.014   0.000   0.000   0.000   0.000   0.060   0.007    0.00   0.290   0.000   0.000   0.014   0.000   0.219
LOW        0.100   0.130   0.000   0.000   0.000   0.000   0.210   0.140    0.00   0.270   0.000   0.000   0.090   0.000   0.500
HIGH       0.150   0.150   0.050   5.835   0.790   0.040   0.295   0.150    1.81   0.680   0.880   1.410   0.110   1.250   0.810

 SOLE, DOVER                     MICROSTOMUS PACIFICUS              059021   AREA- PACIFIC NORTHWEST   SITE- N1   MUSCLE

LENGTH      NUM   10   MEAN         0.382   S. D.      0.005   LOW       0.380   HIGH        0.395
WEIGHT      NUM    0   MEAN         0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER      0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010
N DET.      0003    0001    0002    0000    0000    0006    0001    0000    0000    0005    0007    0009    0000    0003    0000
MEAN       0.085   0.519   0.111   7.750   0.611   0.070   0.191   0.168    4.49   0.261   0.217   0.700   0.246   0.822   0.654
S. D.      0.058   0.293   0.106   3.769   0.227   0.054   0.087   0.057    1.15   0.093   0.126   0.000   0.084   0.840   0.247
LOW        0.040   0.220   0.040   3.565   0.260   0.040   0.080   0.090    2.96   0.110   0.100   0.000   0.105   0.220   0.375
HIGH       0.210   1.110   0.360  14.375   0.920   0.150   0.305   0.250    6.33   0.330   0.350   0.700   0.355   2.350   1.100

 SOLE, DOVER                     MICROSTOMUS PACIFICUS              059021   AREA- PACIFIC NORTHWEST   SITE- N1   LIVER

LENGTH      NUM    1   MEAN         0.395   S. D.      0.000   LOW       0.395   HIGH        0.395
WEIGHT      NUM    0   MEAN         0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000
MEAN       0.116   0.377   0.413   6.300   2.996   0.055   0.778   2.430   19.47   0.520   0.175   1.150   2.180   0.513   0.706
S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH       0.116   0.377   0.413   6.300   2.996   0.055   0.778   2.430   19.47   0.520   0.175   1.150   2.180   0.513   0.706

 SOLE, DOVER                     MICROSTOMUS PACIFICUS              059021   AREA- PACIFIC NORTHWEST   SITE- R2   MUSCLE

LENGTH      NUM    4   MEAN         0.346   S. D.      0.027   LOW       0.305   HIGH        0.360
WEIGHT      NUM    0   MEAN         0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER      0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004
N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0001    0002    0000    0000    0000
MEAN       0.149   0.338   0.055   5.650   0.851   0.050   0.294   0.276    3.26   0.218   0.240   0.170   0.151   0.679   0.635
S. D.      0.077   0.158   0.031   2.482   0.094   0.029   0.228   0.195    0.41   0.043   0.180   0.071   0.023   0.276   0.223
LOW        0.075   0.200   0.030   2.412   0.740   0.020   0.050   0.125    3.00   0.170   0.090   0.120   0.130   0.400   0.400
HIGH       0.220   0.565   0.100   7.707   0.945   0.090   0.500   0.560    3.87   0.250   0.440   0.220   0.180   1.060   0.905

 SOLE, DOVER                     MICROSTOMUS PACIFICUS              059021   AREA- PACIFIC NORTHWEST   SITE- R5   MUSCLE

LENGTH      NUM    1   MEAN         0.375   S. D.      0.000   LOW       0.375   HIGH        0.375
WEIGHT      NUM    0   MEAN         0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0001    0000    0001    0000
MEAN       0.070   0.220   0.055  11.745   0.545   0.055   0.205   0.190    4.55   0.200   0.000   0.000   0.205   0.000   0.625
S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH       0.070   0.220   0.055  11.745   0.545   0.055   0.205   0.190    4.55   0.200   0.000   0.000   0.205   0.000   0.625
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- CALIFORNIA SITE- B2 MUSCLE

LENGTH NUM 10 MEAN 0.364 S. D. 0.022 LOW 0.336 HIGH 0.396
WEIGHT NUM 10 MEAN 0.467 S. D. 0.104 LOW 0.359 HIGH 0.652

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0009	0009	0010	0010	0008
N DET.	0000	0002	0004	0000	0000	0006	0001	0000	0000	0002	0008	0006	0000	0006	00
MEAN	0.113	0.593	0.075	6.274	0.990	0.045	0.176	0.200	5.00	0.247	0.280	0.280	0.212	0.909	0.5
S. D.	0.106	0.675	0.032	1.631	0.372	0.017	0.104	0.072	1.34	0.103	0.000	0.171	0.063	0.059	0.1
LOW	0.020	0.200	0.030	4.450	0.555	0.030	0.040	0.040	3.18	0.130	0.000	0.100	0.120	0.820	0.336
HIGH	0.360	2.250	0.110	9.800	1.730	0.070	0.360	0.285	7.50	0.390	0.280	0.440	0.290	0.940	0.675

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- CALIFORNIA SITE- B8 MUSCLE

LENGTH NUM 10 MEAN 0.382 S. D. 0.007 LOW 0.375 HIGH 0.394
WEIGHT NUM 10 MEAN 0.521 S. D. 0.030 LOW 0.482 HIGH 0.578

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	001
N DET.	0000	0000	0004	0000	0000	0004	0000	0001	0000	0001	0008	0009	0000	0003	000
MEAN	0.137	0.422	0.069	5.910	0.853	0.033	0.175	0.183	4.16	0.288	0.610	0.200	0.113	0.626	0.60
S. D.	0.041	0.209	0.034	3.734	0.158	0.021	0.086	0.066	0.94	0.165	0.368	0.000	0.031	0.298	0.170
LOW	0.085	0.100	0.035	2.540	0.663	0.010	0.070	0.030	2.78	0.120	0.350	0.000	0.070	0.310	0.415
HIGH	0.200	0.740	0.110	13.000	1.180	0.070	0.390	0.245	6.15	0.640	0.870	0.200	0.165	1.120	0.920

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- CALIFORNIA SITE- F4 MUSCLE

LENGTH NUM 10 MEAN 0.415 S. D. 0.039 LOW 0.350 HIGH 0.460
WEIGHT NUM 10 MEAN 0.538 S. D. 0.059 LOW 0.450 HIGH 0.620

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	000
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0006	0005	0000	0000	0000
MEAN	0.098	0.588	0.053	4.795	0.679	0.037	0.226	0.302	5.12	0.193	0.171	0.272	0.179	0.683	1.157
S. D.	0.052	0.215	0.013	1.686	0.186	0.013	0.232	0.083	1.58	0.069	0.136	0.120	0.070	0.229	0.359
LOW	0.030	0.280	0.030	1.475	0.280	0.010	0.010	0.095	2.90	0.060	0.060	0.130	0.130	0.440	0.73
HIGH	0.170	0.940	0.075	6.625	0.906	0.060	0.675	0.380	7.63	0.295	0.370	0.380	0.340	1.060	1.75

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- CALIFORNIA SITE- F4 LIVER

LENGTH NUM 1 MEAN 0.361 S. D. 0.000 LOW 0.361 HIGH 0.361
WEIGHT NUM 1 MEAN 0.390 S. D. 0.000 LOW 0.390 HIGH 0.390

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.040	0.630	1.220	4.800	2.280	0.070	0.190	0.680	30.00	0.400	0.250	0.090	0.990	0.560	0.750
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.300	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.040	0.630	1.220	4.800	2.280	0.070	0.190	0.680	30.00	0.400	0.250	0.090	0.990	0.560	0.75

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- CALIFORNIA SITE- F8 MUSCLE

LENGTH NUM 3 MEAN 0.293 S. D. 0.023 LOW 0.280 HIGH 0.320
WEIGHT NUM 3 MEAN 0.193 S. D. 0.025 LOW 0.170 HIGH 0.220

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	[illegible]
MEAN	0.063	0.482	0.085	4.796	0.592	0.047	0.298	0.300	4.77	0.257	0.620	0.133	0.322	0.675	1.333
S. D.	0.049	0.094	0.013	2.927	0.244	0.008	0.053	0.097	0.21	0.104	0.000	0.103	0.093	0.082	0.128
LOW	0.030	0.380	0.075	1.437	0.335	0.040	0.240	0.190	4.53	0.180	0.000	0.060	0.235	0.625	1.185
HIGH	0.120	0.565	0.100	6.800	0.820	0.055	0.345	0.375	4.94	0.375	0.620	0.205	0.420	0.770	1.410

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- PACIFIC NORTHWEST SITE- H7 MUSCLE

LENGTH NUM 10 MEAN 0.361 S. D. 0.003 LOW 0.360 HIGH 0.370
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0001	0000	0002	0000	0000	0005	0000	0000	0000	0001	0005	0007	0000	0002	0000
MEAN	0.081	0.494	0.103	16.413	0.993	0.051	0.246	0.228	3.91	0.320	0.211	0.327	0.210	0.683	0.560
S. D.	0.139	0.217	0.071	15.672	0.325	0.020	0.144	0.093	0.91	0.239	0.142	0.045	0.042	0.366	0.115
LOW	0.020	0.200	0.030	3.555	0.545	0.030	0.103	0.110	2.38	0.110	0.030	0.280	0.160	0.300	0.400
HIGH	0.450	0.915	0.260	51.225	1.590	0.070	0.500	0.370	4.77	0.815	0.370	0.370	0.300	1.430	0.720

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- PACIFIC NORTHWEST SITE- H7 LIVER

LENGTH NUM 1 MEAN 0.370 S. D. 0.000 LOW 0.370 HIGH 0.370
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.020	0.785	0.500	0.000	1.970	0.030	0.435	6.390	51.07	0.610	0.230	0.400	2.360	0.000	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.785	0.500	0.000	1.970	0.030	0.435	6.390	51.07	0.610	0.230	0.400	2.360	0.000	0.380

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- PACIFIC NORTHWEST SITE- I7 MUSCLE

LENGTH NUM 1 MEAN 0.300 S. D. 0.000 LOW 0.300 HIGH 0.300
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.073	0.566	0.000	5.060	0.730	0.000	0.153	0.266	4.44	0.180	0.000	0.000	0.253	0.700	0.965
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.073	0.566	0.000	5.060	0.730	0.000	0.153	0.266	4.44	0.180	0.000	0.000	0.253	0.700	0.965

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- PACIFIC NORTHWEST SITE- M2 MUSCLE

LENGTH NUM 9 MEAN 0.327 S. D. 0.018 LOW 0.315 HIGH 0.375
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0000	0000	0001	0000	0000	0002	0001	0000	0000	0001	0006	0008	0000	0002	0000
MEAN	0.068	0.603	0.098	13.464	0.911	0.044	0.179	0.254	4.84	0.319	0.073	0.500	0.303	1.274	0.773
S. D.	0.025	0.239	0.109	7.255	0.336	0.011	0.067	0.130	1.01	0.200	0.051	0.000	0.093	0.693	0.289
LOW	0.030	0.250	0.010	6.283	0.515	0.030	0.090	0.103	3.73	0.140	0.030	0.000	0.140	0.570	0.350
HIGH	0.105	1.000	0.360	24.825	1.705	0.060	0.306	0.430	6.22	0.750	0.130	0.500	0.430	2.440	1.250

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- PACIFIC NORTHWEST SITE- M2 LIVER

LENGTH NUM 1 MEAN 0.375 S. D. 0.000 LOW 0.375 HIGH 0.375
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.060	1.210	0.645	7.655	2.275	0.070	0.422	7.085	29.82	0.710	0.210	0.540	2.090	1.650	0.425
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.060	1.210	0.645	7.655	2.275	0.070	0.422	7.085	29.82	0.710	0.210	0.540	2.090	1.650	0.425

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- PACIFIC NORTHWEST SITE- M5 MUSCLE

LENGTH NUM 1 MEAN 0.310 S. D. 0.000 LOW 0.310 HIGH 0.310
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.105	0.400	0.065	4.466	0.436	0.050	0.400	0.215	3.32	0.260	0.050	0.210	0.200	0.940	0.550
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.105	0.400	0.065	4.466	0.436	0.050	0.400	0.215	3.32	0.260	0.050	0.210	0.200	0.940	0.550

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- PACIFIC NORTHWEST SITE- M8 MUSCLE

LENGTH NUM 3 MEAN 0.330 S. D. 0.000 LOW 0.330 HIGH 0.330
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0002	0000	0000	0002	0001	0001	0000	0000	0002	0003	0000	0001	0000
MEAN	0.083	0.577	0.065	5.039	0.793	0.020	0.179	0.140	4.24	0.267	0.870	0.000	0.113	0.838	0.595
S. D.	0.004	0.186	0.000	2.467	0.133	0.000	0.144	0.000	1.66	0.090	0.000	0.000	0.075	0.144	0.160
LOW	0.080	0.380	0.000	3.100	0.640	0.000	0.077	0.140	2.82	0.180	0.000	0.000	0.070	0.736	0.430
HIGH	0.086	0.750	0.065	7.816	0.870	0.020	0.280	0.140	6.06	0.360	0.870	0.000	0.200	0.940	0.750

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- PACIFIC NORTHWEST SITE- N1 MUSCLE

LENGTH NUM 10 MEAN 0.380 S. D. 0.011 LOW 0.360 HIGH 0.385
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0005	0000	0000	0006	0002	0000	0000	0001	0008	0009	0000	0000	0000
MEAN	0.045	0.513	0.032	11.016	0.637	0.030	0.196	0.200	5.01	0.279	0.400	0.120	0.243	0.653	0.752
S. D.	0.028	0.304	0.016	5.924	0.284	0.018	0.129	0.044	0.78	0.188	0.453	0.000	0.072	0.548	0.458
LOW	0.018	0.200	0.010	4.500	0.195	0.010	0.060	0.130	3.79	0.040	0.080	0.000	0.125	0.020	0.190
HIGH	0.110	1.250	0.050	24.750	1.050	0.050	0.400	0.290	6.19	0.575	0.720	0.120	0.340	1.630	1.630

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- PACIFIC NORTHWEST SITE- N1 LIVER

LENGTH NUM 2 MEAN 0.360 S. D. 0.000 LOW 0.360 HIGH 0.360
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0000	0000	0000
MEAN	0.055	0.897	0.818	7.875	2.400	0.173	0.118	5.258	26.15	0.345	0.000	0.583	1.700	0.273	1.000
S. D.	0.007	0.292	0.025	1.591	0.127	0.046	0.045	1.199	2.69	0.000	0.000	0.258	0.445	0.173	0.707
LOW	0.050	0.690	0.800	6.750	2.310	0.140	0.086	4.410	24.24	0.000	0.000	0.400	1.385	0.150	0.500
HIGH	0.060	1.103	0.835	9.000	2.490	0.205	0.150	6.105	28.05	0.345	0.000	0.765	2.015	0.395	1.500

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

SOLE, ENGLISH PAROPHRYS VETULUS 059022 AREA- PACIFIC NORTHWEST SITE- R2 MUSCLE

LENGTH	NUM	6	MEAN	0.323	S. D.	0.004	LOW	0.315	HIGH	0.325
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0005	0006	0006	0006	0006	000
N DET.	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0003	0005	0000	0001	005
MEAN	0.100	0.412	0.085	15.742	0.793	0.048	0.281	0.226	3.85	0.282	0.660	0.380	0.345	1.200	0.51
S. D.	0.048	0.156	0.040	12.042	0.211	0.031	0.106	0.031	0.79	0.072	0.511	0.000	0.195	0.808	0.03
LOW	0.055	0.285	0.036	5.225	0.430	0.030	0.182	0.180	2.84	0.220	0.110	0.000	0.130	0.550	0.500
HIGH	0.190	0.685	0.140	37.010	1.085	0.110	0.440	0.263	5.00	0.390	1.120	0.380	0.610	2.580	0.750

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- E8 MUSCLE

LENGTH	NUM	5	MEAN	0.392	S. D.	0.069	LOW	0.298	HIGH	0.480
WEIGHT	NUM	5	MEAN	0.933	S. D.	0.468	LOW	0.343	HIGH	1.475

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PP
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	000
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0005	0000	0000	000
MEAN	0.100	0.382	0.054	11.288	0.381	0.034	0.133	0.216	3.87	0.208	0.130	0.000	0.142	0.533	0.462
S. D.	0.078	0.174	0.008	9.039	0.201	0.005	0.058	0.064	0.53	0.031	0.000	0.000	0.025	0.132	0.045
LOW	0.020	0.250	0.040	4.350	0.200	0.030	0.060	0.150	3.13	0.170	0.000	0.000	0.115	0.310	0.390
HIGH	0.175	0.660	0.060	23.016	0.625	0.040	0.190	0.315	4.46	0.240	0.130	0.000	0.175	0.630	0.5

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- I7 MUSCLE

LENGTH	NUM	10	MEAN	0.293	S. D.	0.000	LOW	0.293	HIGH	0.293
WEIGHT	NUM	10	MEAN	0.349	S. D.	0.000	LOW	0.349	HIGH	0.349

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000	0007	0005	0000	0000	0000
MEAN	0.060	0.404	0.086	5.751	0.602	0.023	0.195	0.232	4.44	0.177	0.147	0.216	0.151	0.647	0.436
S. D.	0.054	0.201	0.081	1.942	0.321	0.010	0.100	0.112	1.63	0.065	0.075	0.219	0.056	0.131	0.25
LOW	0.020	0.120	0.020	3.345	0.250	0.010	0.050	0.060	1.63	0.060	0.060	0.060	0.060	0.500	0.15
HIGH	0.190	0.690	0.305	8.750	1.120	0.040	0.380	0.440	7.81	0.295	0.190	0.560	0.225	0.840	0.81

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- I7 LIVER

LENGTH	NUM	1	MEAN	0.293	S. D.	0.000	LOW	0.293	HIGH	0.293
WEIGHT	NUM	1	MEAN	0.349	S. D.	0.000	LOW	0.349	HIGH	0.349

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PP
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	0.750	0.230	8.150	2.000	0.020	0.060	2.060	17.50	0.290	0.410	1.410	1.000	0.750	0.22
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.06
HIGH	0.000	0.750	0.230	8.150	2.000	0.020	0.060	2.060	17.50	0.290	0.410	1.410	1.000	0.750	0.22

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- I9 MUSCLE

LENGTH	NUM	1	MEAN	0.384	S. D.	0.000	LOW	0.384	HIGH	0.384
WEIGHT	NUM	1	MEAN	0.667	S. D.	0.000	LOW	0.667	HIGH	0.667

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	000
MEAN	0.070	0.690	0.065	6.000	0.655	0.030	0.160	0.185	4.78	0.240	0.000	0.060	0.145	0.875	0.59
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.070	0.690	0.065	6.000	0.655	0.030	0.160	0.185	4.78	0.240	0.000	0.060	0.145	0.875	0.595

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- J2 MUSCLE

LENGTH	NUM	2	MEAN	0.380	S. D.	0.035	LOW	0.355	HIGH	0.405
WEIGHT	NUM	2	MEAN	0.781	S. D.	0.207	LOW	0.634	HIGH	0.927

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	000
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0000	000
MEAN	0.085	0.520	0.073	3.619	0.453	0.025	0.238	0.138	4.92	0.183	0.190	0.000	0.113	0.505	0.44
S. D.	0.000	0.184	0.004	2.212	0.131	0.007	0.152	0.067	1.65	0.004	0.000	0.000	0.011	0.177	0.085
LOW	0.000	0.390	0.070	2.055	0.360	0.020	0.130	0.090	3.75	0.180	0.000	0.000	0.105	0.380	0.380
HIGH	0.085	0.650	0.075	5.183	0.545	0.030	0.345	0.185	6.09	0.185	0.190	0.000	0.120	0.630	0.50

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- J3 MUSCLE

LENGTH	NUM	10	MEAN	0.356	S. D.	0.073	LOW	0.258	HIGH	0.440
WEIGHT	NUM	10	MEAN	0.940	S. D.	0.446	LOW	0.290	HIGH	1.528

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010
N DET.	0004	0000	0000	0000	0000	0003	0000	0000	0000	0000	0006	0006	0000	0001	0000
MEAN	0.072	0.417	0.086	12.080	0.752	0.041	0.173	0.186	4.53	0.255	0.145	0.265	0.197	0.872	0.495
S. D.	0.043	0.148	0.091	8.408	0.258	0.011	0.132	0.069	0.75	0.132	0.110	0.095	0.060	0.488	0.267
LOW	0.030	0.190	0.030	1.700	0.420	0.030	0.060	0.050	3.44	0.140	0.050	0.150	0.096	0.440	0.010
HIGH	0.140	0.702	0.340	27.525	1.190	0.060	0.520	0.260	5.35	0.535	0.280	0.380	0.310	2.060	0.93

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                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   MF17
                                       IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                       BY TISSUE AND LOCATION    .

FLOUNDER, WINTER                PSEUDOPLEURONECTES AMERICANUS      059030   AREA- NORTH ATLANTIC      SITE- J5   MUSCLE

LENGTH      NUM    1   MEAN          0.470    S. D.       0.000    LOW       0.470    HIGH         0.470
WEIGHT      NUM    1   MEAN          1.220    S. D.       0.000    LOW       1.220    HIGH         1.220
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0001     0001    0001    0001     0001    0001    0001     0001    0001    0001      0001    0001    0001    0001      0001
N DET.      0000     0000    0000    0000     0000    0000    0000     0000    0000    0000      0001    0001    0000    0000      0000
MEAN        0.040    0.310   0.060   2.300    0.250   0.040   0.130    0.180   3.38    0.150     0.000   0.000   0.090   0.560     0.630
S. D.       0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
LOW         0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
HIGH        0.040    0.310   0.060   2.300    0.250   0.040   0.130    0.180   3.38    0.150     0.000   0.000   0.090   0.560     0.630

FLOUNDER, WINTER                PSEUDOPLEURONECTES AMERICANUS      059030   AREA- NORTH ATLANTIC      SITE- J6   MUSCLE

LENGTH      NUM    6   MEAN          0.505    S. D.       0.037    LOW       0.460    HIGH         0.550
WEIGHT      NUM    6   MEAN          1.790    S. D.       0.380    LOW       1.400    HIGH         2.268
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0006     0006    0006    0006     0006    0006    0006     0006    0006    0006      0006    0006    0006    0006      0006
N DET.      0001     0000    0001    0000     0000    0002    0000     0000    0000    0000      0006    0006    0000    0003      0000
MEAN        0.147    0.295   0.080   4.026    0.396   0.030   0.274    0.286   4.74    0.369     0.000   0.000   0.167   0.513     0.543
S. D.       0.224    0.107   0.034   3.988    0.199   0.012   0.273    0.150   1.84    0.154     0.000   0.000   0.071   0.294     0.191
LOW         0.020    0.130   0.040   0.510    0.050   0.020   0.073    0.125   1.69    0.160     0.000   0.000   0.090   0.310     0.365
HIGH        0.540    0.440   0.130  11.175    0.660   0.040   0.810    0.510   7.32    0.550     0.000   0.000   0.250   0.850     0.910

FLOUNDER, WINTER                PSEUDOPLEURONECTES AMERICANUS      059030   AREA- NORTH ATLANTIC      SITE- J6   LIVER

LENGTH      NUM    1   MEAN          0.550    S. D.       0.000    LOW       0.550    HIGH         0.550
WEIGHT      NUM    1   MEAN          2.268    S. D.       0.000    LOW       2.268    HIGH         2.268
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0001     0001    0001    0001     0000    0001    0001     0001    0001    0001      0001    0001    0001    0001      0001
N DET.      0000     0000    0000    0000     0000    0000    0000     0000    0000    0000      0000    0000    0000    0000      0000
MEAN        0.280    1.120   0.300   3.150    0.000   0.020   0.110   13.120  31.25    0.290     0.190   0.750   0.640   0.630     0.190
S. D.       0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
LOW         0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
HIGH        0.280    1.120   0.300   3.150    0.000   0.020   0.110   13.120  31.25    0.290     0.190   0.750   0.640   0.630     0.190

FLOUNDER, WINTER                PSEUDOPLEURONECTES AMERICANUS      059030   AREA- NORTH ATLANTIC      SITE- J7   MUSCLE

LENGTH      NUM   10   MEAN          0.456    S. D.       0.071    LOW       0.360    HIGH         0.550
WEIGHT      NUM   10   MEAN          1.592    S. D.       0.696    LOW       0.694    HIGH         2.536
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0010     0010    0010    0010     0010    0010    0009     0010    0010    0010      0010    0010    0010    0010      0010
N DET.      0004     0000    0000    0000     0000    0001    0000     0000    0000    0000      0009    0009    0000    0001      0000
MEAN        0.113    0.491   0.084   4.805    0.513   0.033   0.374    0.185   4.80    0.192     0.190   0.190   0.104   0.628     0.501
S. D.       0.069    0.276   0.029   2.282    0.167   0.012   0.360    0.093   0.98    0.058     0.000   0.000   0.042   0.297     0.124
LOW         0.040    0.240   0.060   1.340    0.300   0.020   0.060    0.090   2.56    0.040     0.000   0.000   0.060   0.190     0.280
HIGH        0.220    1.130   0.140   8.500    0.800   0.060   0.940    0.400   6.06    0.250     0.190   0.190   0.190   1.250     0.645

FLOUNDER, WINTER                PSEUDOPLEURONECTES AMERICANUS      059030   AREA- NORTH ATLANTIC      SITE- J8   MUSCLE

LENGTH      NUM   11   MEAN          0.443    S. D.       0.079    LOW       0.351    HIGH         0.570
WEIGHT      NUM   11   MEAN          1.412    S. D.       0.731    LOW       0.645    HIGH         2.750
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0012     0012    0012    0012     0012    0012    0012     0012    0012    0012      0012    0012    0012    0012      0012
N DET.      0004     0000    0000    0000     0000    0001    0000     0000    0000    0000      0009    0011    0000    0003      0000
MEAN        0.051    0.396   0.065   4.552    0.471   0.029   0.222    0.258   5.21    0.227     0.137   0.250   0.154   0.604     0.577
S. D.       0.024    0.176   0.028   2.395    0.215   0.008   0.175    0.118   2.46    0.081     0.050   0.000   0.037   0.228     0.212
LOW         0.020    0.185   0.030   1.000    0.080   0.015   0.120    0.060   3.28    0.130     0.090   0.000   0.100   0.250     0.330
HIGH        0.090    0.750   0.120   8.440    0.880   0.040   0.760    0.450  12.50    0.410     0.190   0.250   0.220   0.875     1.130

FLOUNDER, WINTER                PSEUDOPLEURONECTES AMERICANUS      059030   AREA- NORTH ATLANTIC      SITE- J9   MUSCLE

LENGTH      NUM   15   MEAN          0.467    S. D.       0.051    LOW       0.381    HIGH         0.560
WEIGHT      NUM   15   MEAN          1.347    S. D.       0.452    LOW       0.567    HIGH         2.296
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0015     0015    0015    0015     0015    0015    0015     0015    0015    0015      0015    0015    0015    0015      0015
N DET.      0009     0000    0000    0000     0000    0001    0001     0000    0000    0000      0013    0011    0000    0001      0000
MEAN        0.045    0.343   0.080   3.844    0.472   0.033   0.199    0.284   5.32    0.215     0.140   0.430   0.188   0.718     0.599
S. D.       0.029    0.128   0.050   1.462    0.214   0.018   0.111    0.126   2.02    0.053     0.113   0.180   0.162   0.180     0.207
LOW         0.020    0.100   0.036   1.366    0.070   0.010   0.090    0.180   3.38    0.150     0.060   0.250   0.060   0.490     0.310
HIGH        0.100    0.590   0.190   6.300    0.800   0.070   0.500    0.690  11.88    0.330     0.220   0.630   0.750   1.030     0.925

FLOUNDER, WINTER                PSEUDOPLEURONECTES AMERICANUS      059030   AREA- NORTH ATLANTIC      SITE- N2   MUSCLE

LENGTH      NUM    1   MEAN          0.261    S. D.       0.000    LOW       0.261    HIGH         0.261
WEIGHT      NUM    1   MEAN          0.229    S. D.       0.000    LOW       0.229    HIGH         0.229
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0001     0001    0001    0001     0001    0001    0001     0001    0001    0001      0001    0001    0001    0001      0001
N DET.      0000     0000    0000    0000     0000    0000    0000     0000    0000    0000      0001    0000    0000    0000      0000
MEAN        0.150    0.220   0.045   5.912    0.530   0.025   0.190    0.220   5.50    0.155     0.000   0.220   0.130   0.560     0.525
S. D.       0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
LOW         0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
HIGH        0.150    0.220   0.045   5.912    0.530   0.025   0.190    0.220   5.50    0.155     0.000   0.220   0.130   0.560     0.525
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	12	0.277	0.026	0.235	0.312
WEIGHT	12	0.289	0.082	0.173	0.422

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0012	0011	0012	0012	0011	0012	0012	0012	0012	0012	00
N DET.	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000	0012	0011	0000	0003	00
MEAN	0.097	0.348	0.068	4.233	0.484	0.043	0.200	0.254	5.32	0.207	0.000	0.310	0.160	0.652	0.6
S. D.	0.101	0.161	0.021	3.004	0.194	0.011	0.188	0.173	1.52	0.121	0.000	0.000	0.059	0.203	0.2
LOW	0.020	0.190	0.030	0.510	0.130	0.030	0.040	0.060	2.19	0.010	0.000	0.000	0.090	0.380	0.380
HIGH	0.390	0.690	0.120	11.630	0.775	0.060	0.710	0.750	7.59	0.480	0.000	0.310	0.310	1.000	1.220

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- N5 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	7	0.315	0.115	0.200	0.490
WEIGHT	7	0.602	0.659	0.099	1.755

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	00
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0005	0000	0000	00
MEAN	0.047	0.482	0.066	5.075	0.846	0.029	0.663	0.264	5.97	0.187	0.310	0.285	0.200	0.694	0.449
S. D.	0.046	0.205	0.011	2.033	0.647	0.007	1.336	0.079	1.30	0.045	0.000	0.134	0.091	0.130	0.118
LOW	0.020	0.250	0.060	1.200	0.350	0.020	0.120	0.210	4.06	0.120	0.000	0.190	0.130	0.560	0.220
HIGH	0.100	0.750	0.090	7.450	2.200	0.040	3.690	0.440	7.44	0.260	0.310	0.380	0.380	0.870	0.5

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- N8 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.470	0.000	0.470	0.470
WEIGHT	1	1.445	0.000	1.445	1.445

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PP
NUMBER	0001	0001	0001	0000	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	00
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.000	0.190	0.040	0.000	0.000	0.020	0.190	0.330	6.19	0.340	0.000	0.000	0.100	0.000	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.0
HIGH	0.000	0.190	0.040	0.000	0.000	0.020	0.190	0.330	6.19	0.340	0.000	0.000	0.100	0.000	0.6

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- 01 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	4	0.294	0.035	0.256	0.340
WEIGHT	4	0.368	0.148	0.197	0.559

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PP
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0002	0000	0000	0000	0000	0001	0000	0000	0000	0000	0004	0004	0000	0000	0000
MEAN	0.070	0.410	0.075	5.563	0.513	0.037	0.143	0.270	5.76	0.210	0.000	0.000	0.140	0.610	0.57
S. D.	0.042	0.240	0.006	4.449	0.264	0.006	0.062	0.054	1.79	0.070	0.000	0.000	0.028	0.214	0.23
LOW	0.040	0.190	0.070	1.250	0.250	0.030	0.060	0.200	3.60	0.130	0.000	0.000	0.100	0.310	0.31
HIGH	0.100	0.750	0.080	10.700	0.740	0.040	0.190	0.330	7.50	0.290	0.000	0.000	0.160	0.810	0.88

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- 02 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	21	0.341	0.066	0.244	0.500
WEIGHT	21	0.503	0.349	0.190	1.756

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	002
N DET.	0006	0000	0000	0000	0000	0000	0002	0000	0000	0000	0020	0018	0000	0006	000
MEAN	0.076	0.396	0.067	3.971	0.648	0.033	0.119	0.285	4.77	0.210	0.160	0.130	0.156	0.634	0.55
S. D.	0.073	0.207	0.026	2.630	0.224	0.011	0.060	0.157	1.15	0.070	0.000	0.061	0.074	0.132	0.22
LOW	0.020	0.130	0.040	0.950	0.210	0.010	0.040	0.100	1.63	0.100	0.000	0.060	0.070	0.380	0.160
HIGH	0.260	1.000	0.130	9.450	1.120	0.060	0.250	0.630	6.88	0.390	0.160	0.170	0.440	0.810	1.130

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- 03 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	2	0.421	0.134	0.326	0.515
WEIGHT	2	1.012	0.653	0.550	1.474

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	000
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0000	000
MEAN	0.052	0.220	0.028	7.409	0.803	0.025	0.060	0.205	3.92	0.153	0.000	0.000	0.093	0.418	0.51
S. D.	0.045	0.042	0.011	2.487	0.081	0.000	0.000	0.233	4.57	0.117	0.000	0.000	0.103	0.322	0.110
LOW	0.020	0.190	0.020	5.650	0.745	0.000	0.060	0.040	0.69	0.070	0.000	0.000	0.020	0.190	0.440
HIGH	0.083	0.250	0.035	9.167	0.860	0.025	0.060	0.370	7.15	0.235	0.000	0.000	0.165	0.645	0.595

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- P1 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.420	0.000	0.420	0.420
WEIGHT	1	1.040	0.000	1.040	1.040

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.020	0.380	0.100	3.166	0.570	0.030	0.500	0.310	4.97	0.290	0.000	0.310	0.105	0.810	0.440
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.020	0.380	0.100	3.166	0.570	0.030	0.500	0.310	4.97	0.290	0.000	0.310	0.105	0.810	0.44

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

FLOUNDER, WINTER PSEUDOPLEURONECTES AMERICANUS 059030 AREA- NORTH ATLANTIC SITE- P2 MUSCLE

LENGTH NUM 2 MEAN 0.355 S. D. 0.049 LOW 0.320 HIGH 0.390
WEIGHT NUM 2 MEAN 1.625 S. D. 0.969 LOW 0.940 HIGH 2.310

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.000	0.315	0.048	1.815	0.653	0.035	0.125	0.590	2.67	0.168	0.000	0.340	0.173	0.875	0.970
S. D.	0.000	0.262	0.025	0.092	0.088	0.007	0.092	0.410	1.30	0.124	0.000	0.000	0.011	0.092	0.792
LOW	0.000	0.130	0.030	1.750	0.590	0.030	0.060	0.300	1.75	0.080	0.000	0.000	0.165	0.810	0.410
HIGH	0.000	0.500	0.065	1.880	0.715	0.040	0.190	0.880	3.59	0.255	0.000	0.340	0.180	0.940	1.530

BALLYHOO HEMIRAMPHUS BRASILIENSIS 062014 AREA- SOUTH ATLANTIC SITE- M1 WHOLE

LENGTH NUM 38 MEAN 0.220 S. D. 0.033 LOW 0.191 HIGH 0.288
WEIGHT NUM 38 MEAN 0.074 S. D. 0.018 LOW 0.059 HIGH 0.122

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0038	0038	0038	0038	0037	0038	0038	0037	0036	0038	0038	0037	0037	0038	0037
N DET.	0032	0000	0000	0000	0000	0000	0001	0000	0000	0000	0005	0000	0000	0009	0000
MEAN	0.045	1.613	0.204	4.093	0.729	0.166	0.498	0.630	25.48	0.731	0.379	0.683	0.852	2.192	2.026
S. D.	0.048	0.524	0.084	2.549	0.237	0.060	0.155	0.196	10.23	0.409	0.165	0.428	0.306	0.703	1.004
LOW	0.010	0.750	0.060	0.320	0.130	0.070	0.270	0.325	2.50	0.150	0.060	0.080	0.500	1.100	0.950
HIGH	0.140	2.916	0.430	10.450	1.260	0.320	0.945	1.250	55.36	1.710	0.880	2.190	1.890	4.320	4.750

BALLYHOO HEMIRAMPHUS BRASILIENSIS 062014 AREA- SOUTH ATLANTIC SITE- M4 WHOLE

LENGTH NUM 20 MEAN 0.288 S. D. 0.004 LOW 0.278 HIGH 0.294
WEIGHT NUM 20 MEAN 0.116 S. D. 0.006 LOW 0.101 HIGH 0.126

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0019	0020	0020	0019	0020	0020	0020	0020	0019	0020	0019	0020
N DET.	0020	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0005	0000
MEAN	0.000	1.305	0.184	3.272	0.793	0.118	0.371	0.524	25.33	0.367	0.287	0.589	0.624	1.758	1.634
S. D.	0.000	0.360	0.034	2.107	0.363	0.031	0.142	0.154	8.93	0.135	0.076	0.253	0.184	0.578	0.590
LOW	0.000	0.500	0.110	0.600	0.130	0.030	0.070	0.100	2.31	0.060	0.190	0.130	0.080	0.470	0.590
HIGH	0.000	1.880	0.230	8.300	1.460	0.180	0.750	0.720	41.88	0.510	0.410	1.250	0.870	2.640	3.130

GOATFISH MULLOIDICHTYS SAMOENSIS 066009 AREA- HAWAII SITE- D5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 3 MEAN 1.224 S. D. 0.029 LOW 1.191 HIGH 1.247

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0001	0001	0003	0000	0001	0000
MEAN	0.035	0.299	0.052	5.692	0.397	0.025	0.133	0.136	3.26	0.209	0.230	0.000	0.099	0.805	0.408
S. D.	0.007	0.096	0.013	1.760	0.045	0.000	0.085	0.034	0.14	0.105	0.255	0.000	0.025	0.177	0.083
LOW	0.030	0.237	0.040	3.740	0.350	0.025	0.075	0.110	3.15	0.135	0.050	0.000	0.070	0.680	0.340
HIGH	0.040	0.410	0.065	7.160	0.440	0.025	0.230	0.175	3.42	0.283	0.410	0.000	0.116	0.930	0.500

GOATFISH MULLOIDICHTYS SAMOENSIS 066009 AREA- HAWAII SITE- H1 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 10 MEAN 1.283 S. D. 0.339 LOW 0.992 HIGH 1.814

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0010	0000	0003	0000
MEAN	0.110	0.373	0.093	7.662	0.435	0.030	0.195	0.283	5.43	0.228	0.120	0.000	0.239	0.653	0.578
S. D.	0.073	0.198	0.045	4.829	0.226	0.011	0.160	0.193	2.03	0.068	0.000	0.000	0.267	0.196	0.148
LOW	0.040	0.060	0.050	1.780	0.050	0.010	0.040	0.080	2.50	0.120	0.000	0.000	0.060	0.300	0.405
HIGH	0.245	0.630	0.210	15.975	0.700	0.050	0.560	0.725	8.90	0.310	0.120	0.000	0.880	0.830	0.810

GOATFISH MULLOIDICHTYS SAMOENSIS 066009 AREA- HAWAII SITE- H4 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 7 MEAN 1.043 S. D. 0.116 LOW 0.851 HIGH 1.219

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0005	0006	0007	0007	0007	0007	0006	0007	0007	0007	0007	0007
N DET.	0003	0000	0001	0000	0000	0000	0001	0000	0000	0000	0004	0003	0000	0002	0000
MEAN	0.036	0.470	0.066	3.581	0.715	0.031	0.163	0.240	3.87	0.199	0.323	0.215	0.084	0.676	0.551
S. D.	0.032	0.252	0.025	1.767	0.396	0.010	0.122	0.127	0.76	0.054	0.154	0.089	0.022	0.197	0.140
LOW	0.020	0.290	0.040	0.975	0.275	0.010	0.060	0.080	2.86	0.120	0.220	0.100	0.070	0.400	0.405
HIGH	0.085	0.950	0.110	5.462	1.340	0.040	0.380	0.405	4.95	0.260	0.500	0.310	0.130	0.905	0.780

GOATFISH MULLOIDICHTYS SAMOENSIS 066009 AREA- HAWAII SITE- H5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 20 MEAN 0.998 S. D. 0.314 LOW 0.510 HIGH 1.588

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0018
N DET.	0006	0000	0000	0000	0000	0000	0000	0000	0000	0000	0019	0019	0000	0003	0000
MEAN	0.052	0.443	0.073	6.608	0.472	0.035	0.202	0.302	4.88	0.192	0.190	0.120	0.101	0.630	0.550
S. D.	0.030	0.219	0.015	4.494	0.164	0.011	0.099	0.098	1.30	0.077	0.000	0.000	0.039	0.172	0.185
LOW	0.020	0.190	0.050	1.270	0.060	0.010	0.060	0.040	2.19	0.090	0.000	0.000	0.040	0.300	0.220
HIGH	0.120	1.060	0.100	16.500	0.720	0.060	0.440	0.480	8.19	0.430	0.190	0.120	0.190	1.000	1.000

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- J3 MUSCLE

LENGTH NUM 3 MEAN 0.228 S. D. 0.021 LOW 0.204 HIGH 0.241
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0001	0000
MEAN	0.040	0.602	0.093	3.709	0.300	0.050	0.220	0.297	5.56	0.340	0.130	0.040	0.185	0.773	0.590
S. D.	0.028	0.194	0.038	0.552	0.200	0.010	0.192	0.085	0.27	0.075	0.000	0.000	0.033	0.322	0.148
LOW	0.020	0.395	0.050	3.087	0.070	0.040	0.085	0.200	5.38	0.285	0.130	0.000	0.155	0.545	0.420
HIGH	0.060	0.780	0.120	4.140	0.430	0.060	0.440	0.360	5.87	0.425	0.130	0.040	0.220	1.000	0.690

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- J3 LIVER

LENGTH NUM 1 MEAN 0.222 S. D. 0.000 LOW 0.222 HIGH 0.222
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	0.190	0.040	2.750	2.600	0.040	0.190	4.560	9.12	0.170	0.190	0.250	0.340	0.060	0.370
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.190	0.040	2.750	2.600	0.040	0.190	4.560	9.12	0.170	0.190	0.250	0.340	0.060	0.370

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- J4 MUSCLE

LENGTH NUM 1 MEAN 0.970 S. D. 0.000 LOW 0.970 HIGH 0.970
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.220	0.310	0.030	10.050	0.970	0.020	0.190	0.250	5.81	0.220	0.000	0.000	0.070	0.380	0.310
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.220	0.310	0.030	10.050	0.970	0.020	0.190	0.250	5.81	0.220	0.000	0.000	0.070	0.380	0.310

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- J4 LIVER

LENGTH NUM 1 MEAN 0.970 S. D. 0.000 LOW 0.970 HIGH 0.970
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.050	0.315	0.080	4.197	1.100	0.030	0.190	2.895	11.62	0.160	0.190	0.280	0.165	0.310	0.345
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.050	0.315	0.080	4.197	1.100	0.030	0.190	2.895	11.62	0.160	0.190	0.280	0.165	0.310	0.345

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- J5 MUSCLE

LENGTH NUM 3 MEAN 0.843 S. D. 0.025 LOW 0.820 HIGH 0.870
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.178	0.370	0.062	19.967	0.933	0.028	0.167	0.160	3.74	0.128	0.000	0.000	0.092	0.402	0.360
S. D.	0.093	0.234	0.020	14.101	0.208	0.003	0.129	0.030	0.88	0.013	0.000	0.000	0.026	0.054	0.129
LOW	0.120	0.220	0.040	4.450	0.750	0.025	0.060	0.140	3.00	0.115	0.000	0.000	0.070	0.340	0.260
HIGH	0.285	0.640	0.080	32.000	1.160	0.030	0.310	0.195	4.72	0.140	0.000	0.000	0.120	0.440	0.505

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- J5 LIVER

LENGTH NUM 4 MEAN 0.838 S. D. 0.024 LOW 0.820 HIGH 0.870
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0003	0004	0004	0004	0004	0004	0004	0004
N DET.	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.037	0.618	0.404	4.863	1.535	0.057	0.095	7.567	20.57	0.175	0.440	0.440	0.318	0.426	0.363
S. D.	0.025	0.317	0.457	1.138	0.283	0.025	0.035	4.726	8.33	0.100	0.000	0.000	0.126	0.192	0.118
LOW	0.010	0.310	0.075	3.450	1.230	0.030	0.060	2.380	12.56	0.100	0.000	0.000	0.160	0.250	0.190
HIGH	0.060	1.000	1.070	6.200	1.840	0.080	0.130	11.630	31.25	0.320	0.440	0.440	0.460	0.690	0.440

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- K4 MUSCLE

LENGTH NUM 6 MEAN 0.698 S. D. 0.209 LOW 0.280 HIGH 0.820
WEIGHT NUM 4 MEAN 1.379 S. D. 0.817 LOW 0.340 HIGH 2.162

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0001	0000	0000	0000	0000	0002	0001	0000	0000	0000	0006	0006	0000	0000	0001
MEAN	0.156	0.490	0.061	14.406	1.110	0.034	0.113	0.269	4.84	0.184	0.000	0.000	0.151	0.578	0.344
S. D.	0.109	0.190	0.014	9.580	0.543	0.009	0.111	0.078	0.38	0.073	0.000	0.000	0.077	0.189	0.180
LOW	0.050	0.190	0.040	2.025	0.390	0.020	0.050	0.160	4.38	0.100	0.000	0.000	0.100	0.310	0.060
HIGH	0.340	0.750	0.085	27.165	1.700	0.040	0.310	0.360	5.25	0.285	0.000	0.000	0.305	0.810	0.560

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- K4 LIVER

LENGTH NUM 3 MEAN 0.763 S. D. 0.051 LOW 0.720 HIGH 0.820
WEIGHT NUM 2 MEAN 2.020 S. D. 0.201 LOW 1.878 HIGH 2.162

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0003	0000	0000	0000	0000	0002	0001	0000	0000	0000	0002	0002	0000	0001	0001
MEAN	0.000	0.397	0.093	5.230	1.180	0.020	0.050	6.267	13.93	0.123	0.120	0.310	0.233	0.220	0.155
S. D.	0.000	0.096	0.015	2.174	0.459	0.000	0.014	3.244	5.25	0.083	0.000	0.000	0.068	0.042	0.134
LOW	0.000	0.310	0.080	2.800	0.800	0.000	0.040	4.130	8.94	0.030	0.000	0.000	0.180	0.190	0.060
HIGH	0.000	0.500	0.110	6.990	1.690	0.020	0.060	10.000	19.40	0.190	0.120	0.310	0.310	0.250	0.250

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- N2 MUSCLE

LENGTH NUM 1 MEAN 0.700 S. D. 0.000 LOW 0.700 HIGH 0.700
WEIGHT NUM 1 MEAN 5.105 S. D. 0.000 LOW 5.105 HIGH 5.105

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.430	0.380	0.080	3.310	0.890	0.040	0.140	0.290	5.31	0.060	0.000	0.000	0.090	0.280	0.810
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.430	0.380	0.080	3.310	0.890	0.040	0.140	0.290	5.31	0.060	0.000	0.000	0.090	0.280	0.810

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

LENGTH NUM 2 MEAN 0.516 S. D. 0.023 LOW 0.500 HIGH 0.532
WEIGHT NUM 2 MEAN 2.140 S. D. 0.461 LOW 1.814 HIGH 2.466

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.163	0.268	0.035	13.616	1.110	0.048	0.125	0.185	6.25	0.105	0.410	0.060	0.090	0.530	0.315
S. D.	0.060	0.110	0.007	0.000	0.000	0.039	0.092	0.007	4.60	0.021	0.000	0.000	0.042	0.311	0.049
LOW	0.120	0.190	0.030	0.000	0.000	0.020	0.060	0.180	3.00	0.090	0.000	0.000	0.060	0.310	0.280
HIGH	0.205	0.345	0.040	13.616	1.110	0.075	0.190	0.190	9.50	0.120	0.410	0.060	0.120	0.750	0.350

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- N4 MUSCLE

LENGTH NUM 3 MEAN 0.780 S. D. 0.092 LOW 0.700 HIGH 0.880
WEIGHT NUM 3 MEAN 7.415 S. D. 3.023 LOW 5.448 HIGH 10.896

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000	0002	0003	0000	0000	0000
MEAN	0.457	0.327	0.060	8.299	0.932	0.030	0.090	0.225	5.58	0.185	0.160	0.000	0.125	0.378	0.407
S. D.	0.341	0.131	0.000	3.842	0.214	0.000	0.036	0.035	1.15	0.015	0.000	0.000	0.009	0.106	0.113
LOW	0.130	0.205	0.060	4.730	0.690	0.000	0.060	0.190	4.25	0.170	0.000	0.000	0.115	0.310	0.325
HIGH	0.810	0.465	0.060	12.366	1.095	0.030	0.130	0.260	6.25	0.200	0.160	0.000	0.130	0.500	0.535

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- N5 MUSCLE

LENGTH NUM 3 MEAN 0.673 S. D. 0.101 LOW 0.580 HIGH 0.780
WEIGHT NUM 3 MEAN 4.575 S. D. 1.944 LOW 3.280 HIGH 6.810

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0003	0000	0000	0000
MEAN	0.223	0.230	0.075	3.841	0.622	0.048	0.113	0.298	4.25	0.280	0.130	0.000	0.138	0.387	0.558
S. D.	0.172	0.046	0.031	3.485	0.438	0.004	0.045	0.096	1.52	0.125	0.000	0.000	0.020	0.068	0.305
LOW	0.070	0.190	0.050	0.110	0.120	0.045	0.070	0.210	2.50	0.160	0.000	0.000	0.120	0.310	0.375
HIGH	0.410	0.280	0.110	7.012	0.925	0.050	0.160	0.400	5.17	0.410	0.130	0.000	0.160	0.440	0.910

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- N8 MUSCLE

LENGTH NUM 6 MEAN 0.373 S. D. 0.117 LOW 0.300 HIGH 0.610
WEIGHT NUM 6 MEAN 1.097 S. D. 1.330 LOW 0.432 HIGH 3.805

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0004	0000	0003	0000
MEAN	0.133	0.329	0.078	4.832	0.536	0.038	0.214	0.268	4.71	0.265	0.000	0.265	0.165	0.647	0.543
S. D.	0.138	0.197	0.025	2.882	0.225	0.012	0.143	0.107	0.99	0.087	0.000	0.064	0.048	0.156	0.226
LOW	0.020	0.130	0.050	0.480	0.110	0.020	0.095	0.170	3.13	0.180	0.000	0.220	0.090	0.500	0.410
HIGH	0.380	0.655	0.120	7.800	0.770	0.055	0.440	0.395	5.75	0.410	0.000	0.310	0.230	0.810	1.000

GOOSEFISH LOPHIUS AMERICANUS 068001 AREA- NORTH ATLANTIC SITE- O1 H&G

LENGTH NUM 1 MEAN 0.640 S. D. 0.000 LOW 0.640 HIGH 0.640
WEIGHT NUM 1 MEAN 0.974 S. D. 0.000 LOW 0.974 HIGH 0.974

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.200	0.305	0.000	14.550	0.440	0.040	0.780	0.640	4.29	0.320	0.000	0.000	0.070	0.000	0.400
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.200	0.305	0.000	14.550	0.440	0.040	0.780	0.640	4.29	0.320	0.000	0.000	0.070	0.000	0.400

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                                         TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                          REPORT
                                        IN RESOURCE SURVEY SPECIES:
LOCATION LEVEL 5                        BY TISSUE AND LOCATION

 GOOSEFISH                          LOPHIUS AMERICANUS                     068001    AREA- NORTH ATLANTIC        SITE- 01    MUSCLE

LENGTH     NUM   15    MEAN         0.532    S. D.       0.155    LOW        0.275    HIGH          0.820
WEIGHT     NUM   15    MEAN         3.352    S. D.       2.941    LOW        0.274    HIGH         10.900
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC     NICKEL     MOLYB  VANADIUM   MANG   ANTIMONY    TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM      PPM     PPM       PPM        PPM     PPM      PPM      PPM       PPM

NUMBER     0015     0014     0015     0015     0015     0015     0014     0015     0015     0015      0015     0015     0015     0015     0010
N DET.     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000      0013     0012     0000     0002     0000
MEAN      0.177    0.310    0.071    9.443    0.718    0.034    0.150    0.267     5.55    0.191     0.410    0.470    0.151    0.530    0.486
S. D.     0.114    0.130    0.034    5.010    0.300    0.008    0.074    0.125     2.16    0.088     0.311    0.266    0.045    0.209    0.162
LOW       0.040    0.130    0.040    0.980    0.060    0.015    0.060    0.060     1.44    0.060     0.190    0.220    0.090    0.190    0.040
HIGH      0.450    0.625    0.160   17.500    1.130    0.045    0.345    0.590     9.73    0.350     0.630    0.750    0.265    0.830    0.750

 GOOSEFISH                          LOPHIUS AMERICANUS                     068001    AREA- NORTH ATLANTIC        SITE- 01    LIVER

LENGTH     NUM   1     MEAN         0.640    S. D.       0.000    LOW        0.640    HIGH          0.640
WEIGHT     NUM   1     MEAN         0.974    S. D.       0.000    LOW        0.974    HIGH          0.974
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC     NICKEL     MOLYB  VANADIUM   MANG   ANTIMONY    TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM      PPM     PPM       PPM        PPM     PPM      PPM      PPM       PPM

NUMBER     0001     0001     0001     0000     0000     0001     0001     0001     0001     0001      0001     0001     0001     0001     0000
N DET.     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000      0000     0001     0000     0000     0000
MEAN      0.020    0.470    0.190    0.000    0.000    0.050    0.060   24.800    12.00    0.280     0.160    0.000    0.530    0.670    0.000
S. D.     0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000     0.000    0.000    0.000    0.000    0.000
LOW       0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000     0.000    0.000    0.000    0.000    0.000
HIGH      0.020    0.470    0.190    0.000    0.000    0.050    0.060   24.800    12.00    0.280     0.160    0.000    0.530    0.670    0.000

 GOOSEFISH                          LOPHIUS AMERICANUS                     068001    AREA- NORTH ATLANTIC        SITE- 02    MUSCLE

LENGTH     NUM   1     MEAN         0.520    S. D.       0.000    LOW        0.520    HIGH          0.520
WEIGHT     NUM   1     MEAN         2.595    S. D.       0.000    LOW        2.595    HIGH          2.595
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC     NICKEL     MOLYB  VANADIUM   MANG   ANTIMONY    TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM      PPM     PPM       PPM        PPM     PPM      PPM      PPM       PPM

NUMBER     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001      0001     0001     0001     0001     0001
N DET.     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000      0001     0001     0000     0000     0000
MEAN      0.180    0.250    0.060   13.550    0.630    0.030    0.880    0.260     4.13    0.190     0.000    0.000    0.130    0.250    0.530
S. D.     0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000     0.000    0.000    0.000    0.000    0.000
LOW       0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000     0.000    0.000    0.000    0.000    0.000
HIGH      0.180    0.250    0.060   13.550    0.630    0.030    0.880    0.260     4.13    0.190     0.000    0.000    0.130    0.250    0.530

 GOOSEFISH                          LOPHIUS AMERICANUS                     068001    AREA- NORTH ATLANTIC        SITE- 03    MUSCLE

LENGTH     NUM   4     MEAN         0.443    S. D.       0.110    LOW        0.318    HIGH          0.570
WEIGHT     NUM   2     MEAN         0.828    S. D.       0.216    LOW        0.675    HIGH          0.980
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC     NICKEL     MOLYB  VANADIUM   MANG   ANTIMONY    TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM      PPM     PPM       PPM        PPM     PPM      PPM      PPM       PPM

NUMBER     0004     0004     0004     0004     0004     0004     0004     0004     0004     0004      0004     0004     0004     0004     0004
N DET.     0000     0000     0000     0000     0000     0000     0001     0000     0000     0000      0004     0003     0000     0001     0000
MEAN      0.106    0.213    0.045    7.588    0.474    0.025    0.258    0.330     4.76    0.213     0.000    0.130    0.096    0.470    0.518
S. D.     0.076    0.029    0.010    5.045    0.116    0.013    0.172    0.219     2.70    0.051     0.000    0.000    0.064    0.197    0.155
LOW       0.020    0.190    0.040    2.900    0.350    0.010    0.060    0.110     0.81    0.170     0.000    0.000    0.010    0.250    0.440
HIGH      0.200    0.250    0.060   14.750    0.575    0.040    0.370    0.620     6.75    0.270     0.000    0.130    0.150    0.630    0.750

 GOOSEFISH                          LOPHIUS AMERICANUS                     068001    AREA- NORTH ATLANTIC        SITE- 06    MUSCLE

LENGTH     NUM   8     MEAN         0.628    S. D.       0.103    LOW        0.500    HIGH          0.800
WEIGHT     NUM   8     MEAN         3.907    S. D.       1.602    LOW        1.885    HIGH          6.520
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC     NICKEL     MOLYB  VANADIUM   MANG   ANTIMONY    TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM      PPM     PPM       PPM        PPM     PPM      PPM      PPM       PPM

NUMBER     0008     0008     0008     0008     0008     0008     0008     0008     0008     0008      0008     0008     0008     0008     0008
N DET.     0000     0000     0000     0000     0000     0000     0001     0000     0000     0000      0006     0006     0001     0000     0000
MEAN      0.189    0.333    0.047   10.548    0.842    0.030    0.202    0.195     4.32    0.198     0.140    0.085    0.134    0.530    0.498
S. D.     0.091    0.132    0.013    1.671    0.189    0.011    0.077    0.086     1.76    0.071     0.071    0.064    0.052    0.130    0.085
LOW       0.120    0.190    0.020    8.000    0.546    0.015    0.100    0.050     0.06    0.100     0.090    0.040    0.070    0.310    0.380
HIGH      0.400    0.565    0.060   13.495    1.120    0.040    0.290    0.340     5.34    0.310     0.190    0.130    0.205    0.690    0.660

 GOOSEFISH                          LOPHIUS AMERICANUS                     068001    AREA- NORTH ATLANTIC        SITE- P1    MUSCLE

LENGTH     NUM   1     MEAN         0.740    S. D.       0.000    LOW        0.740    HIGH          0.740
WEIGHT     NUM   1     MEAN         5.480    S. D.       0.000    LOW        5.480    HIGH          5.480
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC     NICKEL     MOLYB  VANADIUM   MANG   ANTIMONY    TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM      PPM     PPM       PPM        PPM     PPM      PPM      PPM       PPM

NUMBER     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001      0001     0001     0001     0001     0001
N DET.     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000      0001     0001     0000     0000     0000
MEAN      0.165    0.190    0.030   15.200    0.910    0.025    0.080    0.420     3.62    0.145     0.000    0.000    0.130    0.500    0.535
S. D.     0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000     0.000    0.000    0.000    0.000    0.000
LOW       0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000     0.000    0.000    0.000    0.000    0.000
HIGH      0.165    0.190    0.030   15.200    0.910    0.025    0.080    0.420     3.62    0.145     0.000    0.000    0.130    0.500    0.535

 GOOSEFISH                          LOPHIUS AMERICANUS                     068001    AREA- NORTH ATLANTIC        SITE- R6    MUSCLE

LENGTH     NUM   4     MEAN         0.805    S. D.       0.082    LOW        0.700    HIGH          0.900
WEIGHT     NUM   4     MEAN        10.783    S. D.       4.392    LOW        7.264    HIGH         16.344
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC     NICKEL     MOLYB  VANADIUM   MANG   ANTIMONY    TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM      PPM     PPM       PPM        PPM     PPM      PPM      PPM       PPM

NUMBER     0004     0003     0004     0004     0004     0004     0003     0004     0003     0003      0004     0004     0003     0003     0003
N DET.     0000     0000     0000     0000     0000     0002     0000     0000     0000     0000      0003     0003     0000     0000     0000
MEAN      0.606    0.477    0.078   10.916    0.838    0.078    0.088    0.584     6.02    0.168     0.220    2.160    0.135    0.405    0.410
S. D.     0.324    0.127    0.025    4.844    0.251    0.074    0.026    0.218     1.18    0.060     0.000    0.000    0.023    0.113    0.136
LOW       0.245    0.340    0.055    6.487    0.540    0.025    0.060    0.390     4.96    0.120     0.000    0.000    0.110    0.310    0.295
HIGH      1.020    0.590    0.110   16.476    1.150    0.130    0.110    0.880     7.30    0.235     0.220    2.160    0.155    0.530    0.560
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                                   TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                  REPORT   MF17
                                  IN RESOURCE SURVEY SPECIES:
LOCATION LEVEL 5                  BY TISSUE AND LOCATION

OOSEFISH                       LOPHIUS AMERICANUS                  068001   AREA- NORTH ATLANTIC       SITE- S1   MUSCLE

ENGTH      NUM   20   MEAN        0.301    S. D.       0.085   LOW       0.223    HIGH         0.610
EIGHT      NUM   20   MEAN        0.565    S. D.       0.633   LOW       0.167    HIGH         3.130
        MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM     PPM

UMBER     0020    0020    0020    0020    0020    0020    0020    0020   0020     0020      0020    0020    0019    0020    0019
 DET.     0002    0000    0000    0000    0000    0000    0000    0000   0000     0000      0018    0020    0000    0007    0000
EAN      0.090   0.338   0.074   4.160   0.478   0.042   0.161   0.308   4.94    0.236     0.170   0.000   0.176   0.593   0.591
 D.      0.056   0.155   0.024   3.147   0.215   0.013   0.083   0.160   1.44    0.088     0.014   0.000   0.045   0.182   0.166
LOW      0.020   0.130   0.025   1.470   0.070   0.030   0.060   0.130   2.00    0.090     0.160   0.000   0.080   0.380   0.375
HIGH     0.190   0.750   0.125  12.500   1.010   0.080   0.380   0.810   8.56    0.490     0.180   0.000   0.245   0.940   1.000

 LINGCOD                       OPHIODON ELONGATUS                  071005   AREA- CALIFORNIA           SITE- F4   MUSCLE

LENGTH     NUM   10   MEAN        0.573    S. D.       0.037   LOW       0.515    HIGH         0.630
WEIGHT     NUM   10   MEAN        2.114    S. D.       0.525   LOW       1.410    HIGH         2.950
        MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM     PPM

 UMBER    0010    0010    0010    0010    0010    0010    0010    0010   0010     0010      0010    0010    0010    0010    0009
  DET.    0000    0000    0000    0000    0000    0000    0000    0000   0000     0000      0009    0010    0000    0007    0000
MEAN     0.135   0.335   0.083   1.163   0.395   0.033   0.146   0.327   3.42    0.230     0.180   0.000   0.107   0.483   0.506
S. D.    0.073   0.082   0.041   0.919   0.201   0.006   0.056   0.103   0.34    0.053     0.000   0.000   0.030   0.131   0.120
LOW      0.020   0.190   0.040   0.295   0.130   0.020   0.060   0.130   2.78    0.160     0.000   0.000   0.050   0.380   0.440
 IGH     0.280   0.440   0.175   3.000   0.770   0.040   0.260   0.480   3.81    0.320     0.180   0.000   0.155   0.630   0.810

LINGCOD                        OPHIODON ELONGATUS                  071005   AREA- CALIFORNIA           SITE- F4   LIVER

LENGTH     NUM   1    MEAN        0.573    S. D.       0.000   LOW       0.573    HIGH         0.573
WEIGHT     NUM   1    MEAN        2.114    S. D.       0.000   LOW       2.114    HIGH         2.114
        MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM     PPM

UMBER     0001    0001    0001    0001    0001    0001    0001    0001   0001     0001      0001    0001    0001    0001    0001
N DET.    0000    0000    0000    0000    0000    0000    0000    0000   0000     0000      0000    0001    0000    0000    0000
MEAN     0.080   0.220   2.460   0.895   1.285   0.055   0.370  27.690  23.91    0.290     0.530   0.000   0.505   0.500   0.410
S. D.    0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000   0.000
OW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000   0.000
IGH      0.080   0.220   2.460   0.895   1.285   0.055   0.370  27.690  23.91    0.290     0.530   0.000   0.505   0.500   0.410

 LINGCOD                       OPHIODON ELONGATUS                  071005   AREA- CALIFORNIA           SITE- F8   MUSCLE

ENGTH      NUM   10   MEAN        0.677    S. D.       0.022   LOW       0.629    HIGH         0.707
EIGHT      NUM   10   MEAN        3.130    S. D.       0.415   LOW       2.300    HIGH         3.800
        MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0010    0010    0010    0009    0009    0010    0010    0010   0009     0009      0010    0010    0010    0010    0010
N DET.    0000    0001    0003    0000    0000    0004    0001    0000   0000     0002      0008    0010    0001    0003    0000
MEAN     0.201   0.442   0.067   2.738   0.639   0.047   0.180   0.270   4.75    0.253     0.105   0.000   0.091   0.935   0.523
S. D.    0.071   0.193   0.037   2.037   0.188   0.012   0.111   0.107   0.82    0.242     0.021   0.000   0.041   0.525   0.129
LOW      0.090   0.160   0.030   0.700   0.355   0.040   0.080   0.140   3.65    0.070     0.090   0.000   0.020   0.200   0.300
HIGH     0.320   0.755   0.140   6.860   0.930   0.070   0.390   0.475   5.64    0.780     0.120   0.000   0.160   1.550   0.750

 LINGCOD                       OPHIODON ELONGATUS                  071005   AREA- CALIFORNIA           SITE- F8   LIVER

LENGTH     NUM   1    MEAN        0.677    S. D.       0.000   LOW       0.677    HIGH         0.677
WEIGHT     NUM   1    MEAN        3.130    S. D.       0.000   LOW       3.130    HIGH         3.130
        MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0001    0001    0001    0001    0001    0001    0001    0001   0001     0001      0001    0001    0001    0001    0001
N DET.    0000    0000    0000    0000    0000    0000    0001    0000   0000     0000      0000    0001    0000    0000    0000
MEAN     0.020   0.060   0.790   0.400   1.580   0.010   0.000  10.690  45.62    0.140     0.870   0.000   0.510   0.870   0.750
S. D.    0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000   0.000
LOW      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000   0.000
HIGH     0.020   0.060   0.790   0.400   1.580   0.010   0.000  10.690  45.62    0.140     0.870   0.000   0.510   0.870   0.750

 LINGCOD                       OPHIODON ELONGATUS                  071005   AREA- PACIFIC NORTHWEST   SITE- G9   MUSCLE

LENGTH     NUM   1    MEAN        0.840    S. D.       0.000   LOW       0.840    HIGH         0.840
WEIGHT     NUM   1    MEAN        7.258    S. D.       0.000   LOW       7.258    HIGH         7.258
        MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0001    0001    0001    0001    0001    0001    0001    0001   0001     0001      0001    0001    0001    0001    0001
N DET.    0000    0001    0001    0000    0000    0001    0001    0000   0000     0001      0001    0001    0000    0001    0000
MEAN     0.140   0.000   0.000   0.660   0.430   0.000   0.000   0.430   5.36    0.000     0.000   0.000   0.110   0.000   0.700
S. D.    0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000   0.000
LOW      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000   0.000
HIGH     0.140   0.000   0.000   0.660   0.430   0.000   0.000   0.430   5.36    0.000     0.000   0.000   0.110   0.000   0.700

 LINGCOD                       OPHIODON ELONGATUS                  071005   AREA- PACIFIC NORTHWEST   SITE- H7   MUSCLE

LENGTH     NUM   10   MEAN        0.516    S. D.       0.078   LOW       0.425    HIGH         0.630
WEIGHT     NUM   0    MEAN        0.000    S. D.       0.000   LOW       0.000    HIGH         0.000
        MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM     PPM

NUMBER    0010    0010    0010    0008    0008    0010    0010    0010   0010     0010      0010    0010    0010    0010    0010
N DET.    0000    0000    0001    0000    0000    0003    0000    0000   0000     0002      0007    0006    0000    0002    0000
MEAN     0.050   0.377   0.056   2.862   0.710   0.060   0.153   0.200   5.13    0.251     0.218   0.173   0.128   0.794   0.563
S. D.    0.032   0.145   0.038   1.746   0.184   0.071   0.056   0.052   0.98    0.137     0.260   0.142   0.036   0.337   0.113
LOW      0.020   0.050   0.020   0.825   0.525   0.020   0.060   0.090   4.02    0.120     0.030   0.060   0.055   0.400   0.400
HIGH     0.130   0.586   0.140   5.280   1.100   0.220   0.250   0.263   6.54    0.555     0.515   0.380   0.170   1.500   0.725
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                                      TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                REPORT
                                      IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                      BY TISSUE AND LOCATION


LINGCOD                         OPHIODON ELONGATUS                  071005   AREA- PACIFIC NORTHWEST   SITE- H7   LIVER

LENGTH    NUM    2   MEAN      0.578   S. D.     0.074   LOW      0.525   HIGH       0.630
WEIGHT    NUM    0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH       0.000
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0002     0002     0002     0002     0002     0002     0002     0002     0002     0002     0002     0002     0002     0002     0002
N DET.         0002     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0002     0000     0000     0000
MEAN          0.000    0.195    0.178    3.770    0.335    0.028    0.073    5.190    17.69    0.165    0.280    0.000    0.488    0.548    0.652
S. D.         0.000    0.092    0.173    3.069    0.247    0.004    0.018    2.913     5.13    0.092    0.042    0.000    0.060    0.152    0.219
LOW           0.000    0.130    0.055    1.600    0.160    0.025    0.060    3.130    14.06    0.100    0.250    0.000    0.445    0.440    0.500
HIGH          0.000    0.260    0.300    5.940    0.510    0.030    0.085    7.250    21.32    0.230    0.310    0.000    0.530    0.655    0.810


LINGCOD                         OPHIODON ELONGATUS                  071005   AREA- PACIFIC NORTHWEST   SITE- H9   MUSCLE

LENGTH    NUM    1   MEAN      0.750   S. D.     0.000   LOW      0.750   HIGH       0.750
WEIGHT    NUM    1   MEAN      6.350   S. D.     0.000   LOW      6.350   HIGH       6.350
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0001     0000     0000     0000     0000
MEAN          0.265    0.463    0.010    2.565    0.740    0.010    0.133    0.226     5.80    0.090    0.000    0.280    0.106    0.735    0.655
S. D.         0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
LOW           0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
HIGH          0.265    0.463    0.010    2.565    0.740    0.010    0.133    0.226     5.80    0.090    0.000    0.280    0.106    0.735    0.655


LINGCOD                         OPHIODON ELONGATUS                  071005   AREA- PACIFIC NORTHWEST   SITE- I7   MUSCLE

LENGTH    NUM   12   MEAN      0.962   S. D.     0.098   LOW      0.820   HIGH       1.110
WEIGHT    NUM    2   MEAN     12.479   S. D.     2.880   LOW     10.442   HIGH      14.515
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0012     0012     0012     0012     0011     0012     0011     0011     0012     0011     0012     0012     0012     0012     0012
N DET.         0000     0000     0000     0000     0000     0001     0000     0001     0000     0000     0007     0008     0000     0000     0000
MEAN          0.648    0.370    0.061    1.924    0.630    0.065    0.156    0.286     4.88    0.215    0.168    0.230    0.132    0.598    0.508
S. D.         0.351    0.092    0.025    0.774    0.109    0.069    0.101    0.146     0.85    0.088    0.107    0.096    0.053    0.278    0.181
LOW           0.260    0.220    0.020    0.847    0.410    0.030    0.060    0.120     3.81    0.080    0.060    0.090    0.065    0.160    0.220
HIGH          1.345    0.500    0.095    3.156    0.780    0.260    0.365    0.560     6.09    0.420    0.310    0.300    0.270    0.985    0.780


LINGCOD                         OPHIODON ELONGATUS                  071005   AREA- PACIFIC NORTHWEST   SITE- I7   LIVER

LENGTH    NUM    2   MEAN      1.055   S. D.     0.078   LOW      1.000   HIGH       1.110
WEIGHT    NUM    1   MEAN     14.515   S. D.     0.000   LOW     14.515   HIGH      14.515
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0002     0002     0002     0002     0002     0002     0002     0002     0002     0002     0002     0002     0002     0002     0000
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000
MEAN          1.470    0.780    0.425    3.825    1.145    0.040    0.125    5.865    18.68    0.530    0.330    0.220    0.440    1.010    0.000
S. D.         0.608    0.495    0.262    0.955    0.247    0.000    0.021    3.528     6.97    0.368    0.028    0.184    0.085    0.184    0.000
LOW           1.040    0.430    0.240    3.150    0.970    0.040    0.110    3.370    13.75    0.270    0.310    0.090    0.380    0.880    0.000
HIGH          1.900    1.130    0.610    4.500    1.320    0.040    0.140    8.360    23.60    0.790    0.350    0.350    0.500    1.140    0.000


LINGCOD                         OPHIODON ELONGATUS                  071005   AREA- PACIFIC NORTHWEST   SITE- M2   MUSCLE

LENGTH    NUM    3   MEAN      0.705   S. D.     0.194   LOW      0.485   HIGH       0.850
WEIGHT    NUM    3   MEAN      5.065   S. D.     3.970   LOW      1.134   HIGH       9.072
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0003     0003     0003     0003     0003     0003     0003     0003     0003     0003     0003     0003     0003     0003     0003
N DET.         0000     0000     0002     0000     0000     0001     0000     0000     0000     0000     0002     0002     0000     0000     0000
MEAN          0.190    0.358    0.060    2.333    0.623    0.045    0.098    0.208     4.03    0.170    0.350    0.600    0.145    1.300    0.460
S. D.         0.100    0.014    0.000    1.816    0.158    0.035    0.003    0.068     2.20    0.070    0.000    0.000    0.035    0.999    0.165
LOW           0.090    0.350    0.000    1.250    0.450    0.020    0.095    0.140     1.54    0.120    0.000    0.000    0.110    0.450    0.300
HIGH          0.290    0.375    0.060    4.430    0.760    0.070    0.100    0.275     5.71    0.250    0.350    0.600    0.180    2.400    0.630


LINGCOD                         OPHIODON ELONGATUS                  071005   AREA- PACIFIC NORTHWEST   SITE- M5   MUSCLE

LENGTH    NUM    6   MEAN      0.684   S. D.     0.181   LOW      0.460   HIGH       0.910
WEIGHT    NUM    2   MEAN      2.665   S. D.     1.684   LOW      1.474   HIGH       3.856
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0006     0006     0006     0006     0006     0006     0006     0006     0006     0006     0006     0006     0006     0006     0006
N DET.         0000     0000     0003     0000     0000     0003     0000     0000     0000     0001     0005     0005     0000     0000     0000
MEAN          0.163    0.498    0.040    2.456    0.542    0.033    0.202    0.260     4.42    0.174    0.010    0.280    0.141    1.049    0.683
S. D.         0.144    0.178    0.026    2.016    0.237    0.006    0.079    0.054     1.52    0.082    0.000    0.000    0.049    0.538    0.139
LOW           0.040    0.260    0.010    0.530    0.305    0.030    0.100    0.165     2.89    0.070    0.000    0.000    0.070    0.325    0.550
HIGH          0.410    0.800    0.060    5.900    0.955    0.040    0.280    0.326     6.48    0.260    0.010    0.280    0.210    1.930    0.905


LINGCOD                         OPHIODON ELONGATUS                  071005   AREA- PACIFIC NORTHWEST   SITE- M8   MUSCLE

LENGTH    NUM    4   MEAN      0.790   S. D.     0.116   LOW      0.640   HIGH       0.920
WEIGHT    NUM    4   MEAN      6.237   S. D.     3.017   LOW      2.722   HIGH       9.979
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0004     0004     0004     0003     0003     0004     0004     0003     0004     0004     0004     0004     0004     0004     0004
N DET.         0000     0000     0002     0000     0000     0002     0000     0000     0000     0000     0004     0004     0000     0002     0000
MEAN          0.314    0.408    0.048    1.870    0.793    0.040    0.121    0.230     5.12    0.240    0.000    0.000    0.171    1.045    0.384
S. D.         0.209    0.211    0.011    2.093    0.300    0.000    0.112    0.035     1.55    0.081    0.000    0.000    0.129    1.039    0.051
LOW           0.100    0.135    0.040    0.150    0.530    0.040    0.040    0.190     2.86    0.180    0.000    0.000    0.070    0.310    0.330
HIGH          0.515    0.605    0.055    4.200    1.120    0.040    0.280    0.250     6.20    0.360    0.000    0.000    0.360    1.780    0.430
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OCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

INGCOD OPHIODON ELONGATUS 071005 AREA- PACIFIC NORTHWEST SITE- N1 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
NGTH	12	0.810	0.058	0.710	0.920
IGHT	11	5.015	1.754	3.405	8.626

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
MBER	0012	0012	0012	0012	0011	0012	0012	0012	0012	0012	0012	0012	0012	0012	0010
DET.	0000	0000	0000	0000	0000	0002	0000	0001	0000	0000	0007	0008	0000	0002	0000
AN	0.451	0.514	0.059	2.013	0.538	0.039	0.178	0.265	4.44	0.178	0.106	0.508	0.132	0.928	0.546
D.	0.159	0.270	0.019	1.152	0.313	0.015	0.193	0.163	1.39	0.057	0.071	0.277	0.062	0.258	0.188
LOW	0.200	0.220	0.035	0.800	0.050	0.010	0.040	0.120	2.63	0.080	0.060	0.310	0.055	0.625	0.205
HIGH	0.755	1.130	0.090	4.000	1.116	0.060	0.750	0.715	7.40	0.270	0.220	0.910	0.250	1.345	0.840

INGCOD OPHIODON ELONGATUS 071005 AREA- PACIFIC NORTHWEST SITE- N1 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
NGTH	7	0.829	0.052	0.760	0.920
WEIGHT	6	5.221	1.747	3.859	8.626

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
MBER	0007	0007	0007	0005	0002	0006	0007	0007	0007	0006	0007	0007	0007	0007	0007
DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0000	0000
EAN	0.493	0.883	0.569	0.861	1.198	0.048	0.456	13.923	32.89	0.222	0.438	0.282	0.664	0.687	0.459
S. D.	0.242	0.485	0.327	0.553	0.527	0.028	0.481	11.174	13.54	0.057	0.188	0.137	0.199	0.161	0.175
LOW	0.200	0.310	0.200	0.205	0.825	0.010	0.010	2.380	16.88	0.120	0.150	0.070	0.380	0.530	0.220
IGH	0.780	1.750	1.070	1.600	1.570	0.090	1.400	30.200	59.37	0.280	0.690	0.440	0.930	0.900	0.750

INGCOD OPHIODON ELONGATUS 071005 AREA- PACIFIC NORTHWEST SITE- R2 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	4	0.670	0.247	0.350	0.940
WEIGHT	2	6.464	5.613	2.495	10.433

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0003	0000	0000	0000	0000	0004	0003	0000	0001	0000
MEAN	0.290	0.358	0.059	4.368	0.773	0.010	0.158	0.345	4.62	0.208	0.000	0.280	0.260	0.723	0.376
S. D.	0.221	0.129	0.018	3.659	0.607	0.000	0.064	0.130	0.44	0.091	0.000	0.000	0.179	0.214	0.089
OW	0.085	0.250	0.040	1.030	0.265	0.000	0.095	0.253	4.25	0.080	0.000	0.000	0.090	0.600	0.250
IGH	0.560	0.545	0.082	8.960	1.655	0.010	0.240	0.530	5.23	0.290	0.000	0.280	0.500	0.970	0.450

LINGCOD OPHIODON ELONGATUS 071005 AREA- PACIFIC NORTHWEST SITE- R5 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	3	0.653	0.050	0.600	0.700
EIGHT	3	3.054	0.754	2.359	3.856

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
EAN	0.202	0.303	0.073	2.547	0.472	0.050	0.183	0.300	4.51	0.170	0.445	0.450	0.162	0.650	0.620
. D.	0.028	0.215	0.032	0.761	0.309	0.052	0.021	0.026	0.70	0.053	0.233	0.240	0.080	0.304	0.166
OW	0.175	0.120	0.050	1.685	0.125	0.020	0.160	0.270	4.02	0.130	0.280	0.280	0.070	0.450	0.500
IGH	0.230	0.540	0.110	3.125	0.720	0.110	0.200	0.320	5.31	0.230	0.610	0.620	0.220	1.000	0.810

LINGCOD OPHIODON ELONGATUS 071005 AREA- PACIFIC NORTHWEST SITE- R8 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
ENGTH	2	0.735	0.021	0.720	0.750
EIGHT	2	3.629	0.641	3.175	4.082

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0000	0000
EAN	0.130	0.282	0.065	2.600	0.513	0.070	0.205	0.295	4.01	0.145	0.000	0.000	0.093	0.915	0.403
S. D.	0.014	0.016	0.035	2.192	0.046	0.000	0.007	0.120	0.33	0.007	0.000	0.000	0.032	0.820	0.138
LOW	0.120	0.270	0.040	1.050	0.480	0.000	0.200	0.210	3.78	0.140	0.000	0.000	0.070	0.335	0.305
HIGH	0.140	0.293	0.090	4.150	0.545	0.070	0.210	0.380	4.24	0.150	0.000	0.000	0.115	1.495	0.500

GRUNT, WHITE HAEMULON PLUMIERI 073014 AREA- SOUTH ATLANTIC SITE- M4 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	12	0.238	0.019	0.208	0.272
WEIGHT	12	0.272	0.069	0.169	0.419

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0012	0012	0011	0012	0011	0012	0012	0012	0012	0012	0012
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0012	0009	0000	0004	0000
MEAN	0.256	0.555	0.081	4.879	0.431	0.046	0.240	0.298	3.52	0.255	0.000	0.250	0.122	0.854	0.595
S. D.	0.094	0.269	0.027	2.304	0.215	0.013	0.163	0.084	0.45	0.048	0.000	0.000	0.037	0.258	0.236
LOW	0.150	0.285	0.045	1.310	0.120	0.030	0.060	0.215	2.81	0.185	0.000	0.250	0.080	0.380	0.340
HIGH	0.430	1.160	0.140	8.150	0.750	0.075	0.580	0.490	4.22	0.345	0.000	0.250	0.210	1.[illegible]	[illegible].280

GRUNT, WHITE HAEMULON PLUMIERI 073014 AREA- GULF SITE- R6 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0003	0003	0000	0001	0000
MEAN	0.228	0.515	0.079	4.890	0.485	0.063	0.159	0.258	4.91	0.273	0.185	0.165	0.151	0.748	0.733
S. D.	0.081	0.190	0.027	1.178	0.254	0.010	0.080	0.069	0.43	0.123	0.177	0.163	0.076	0.483	0.444
LOW	0.100	0.200	0.050	3.300	0.210	0.050	0.095	0.165	4.40	0.180	0.060	0.050	0.090	0.060	0.335
HIGH	0.300	0.690	0.120	6.350	0.882	0.070	0.295	0.330	5.51	0.475	0.310	0.280	0.280	1.150	1.400

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

GRUNT, BLUESTRIPED (YELLOW) HAEMULON SCIURUS 073015 AREA- SOUTH ATLANTIC SITE- M4 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	10	0.240	0.020	0.199	0.268
WEIGHT	10	0.280	0.060	0.169	0.373

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0008	0009	0000	0010	000[illegible]
MEAN	0.354	0.542	0.088	2.637	0.551	0.039	0.198	0.267	3.97	0.256	0.160	0.315	0.120	0.000	0.54[illegible]
S. D.	0.134	0.214	0.028	1.159	0.237	0.015	0.081	0.090	0.67	0.024	0.042	0.000	0.017	0.000	0.09[illegible]
LOW	0.120	0.345	0.065	1.246	0.230	0.020	0.130	0.110	3.03	0.225	0.130	0.000	0.090	0.000	0.410
HIGH	0.565	1.005	0.160	5.550	0.980	0.070	0.375	0.475	5.22	0.290	0.190	0.315	0.135	0.000	0.720

GRUNT, BLUESTRIPED (YELLOW) HAEMULON SCIURUS 073015 AREA- GULF SITE- R6 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.232	0.000	0.232	0.232
WEIGHT	1	0.258	0.000	0.258	0.258

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0005	0006	0006	0006	0006	0006	0006	0006	000[illegible]
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0004	0000	0000	000[illegible]
MEAN	1.023	0.464	0.050	5.868	0.408	0.039	0.136	0.244	3.04	0.229	0.197	0.510	0.118	0.689	0.569
S. D.	0.376	0.138	0.014	2.369	0.187	0.014	0.051	0.113	0.98	0.052	0.040	0.099	0.038	0.146	0.184
LOW	0.280	0.285	0.030	2.883	0.190	0.020	0.083	0.030	2.25	0.190	0.160	0.440	0.080	0.515	0.390
HIGH	1.330	0.690	0.065	9.450	0.706	0.060	0.190	0.350	4.86	0.330	0.240	0.580	0.185	0.880	0.88[illegible]

PIGFISH ORTHOPRISTIS CHRYSOPTERA 073017 AREA- NORTH ATLANTIC SITE- M8 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	3	0.262	0.078	0.193	0.346
WEIGHT	3	0.465	0.375	0.181	0.890

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0001	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.165	0.992	0.055	2.920	0.790	0.040	0.260	0.257	4.07	0.220	0.370	0.440	0.198	0.855	0.535
S. D.	0.049	0.521	0.021	0.601	0.338	0.000	0.213	0.085	0.93	0.118	0.000	0.000	0.062	0.290	0.13[illegible]
LOW	0.130	0.536	0.040	2.300	0.525	0.040	0.080	0.160	3.00	0.090	0.000	0.000	0.130	0.650	0.42[illegible]
HIGH	0.200	1.560	0.070	3.500	1.170	0.040	0.495	0.320	4.64	0.320	0.370	0.440	0.250	1.060	0.68[illegible]

PIGFISH ORTHOPRISTIS CHRYSOPTERA 073017 AREA- NORTH ATLANTIC SITE- R8 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	9	0.250	0.000	0.250	0.250
WEIGHT	9	0.176	0.000	0.176	0.176

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0008	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0008
N DET.	0000	0000	0001	0000	0000	0003	0001	0000	0000	0001	0003	0005	0000	0002	0000
MEAN	0.068	0.506	0.086	2.233	0.724	0.092	0.185	0.438	7.15	0.428	0.140	0.238	0.812	0.834	0.777
S. D.	0.033	0.236	0.031	0.917	0.189	0.101	0.061	0.176	2.67	0.152	0.111	0.176	0.487	0.627	0.208
LOW	0.030	0.110	0.040	0.813	0.380	0.030	0.080	0.110	3.57	0.240	0.050	0.125	0.360	0.360	0.620
HIGH	0.130	0.750	0.110	3.530	1.030	0.290	0.293	0.750	11.60	0.715	0.350	0.500	1.855	2.075	1.250

PIGFISH ORTHOPRISTIS CHRYSOPTERA 073017 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	10	0.232	0.000	0.232	0.232
WEIGHT	10	0.227	0.000	0.227	0.227

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0009	0000	0003	0000
MEAN	0.114	0.355	0.072	1.702	0.619	0.039	0.203	0.456	3.82	0.174	0.000	0.480	0.159	0.600	0.554
S. D.	0.046	0.095	0.020	0.770	0.221	0.005	0.191	0.181	0.91	0.061	0.000	0.000	0.049	0.233	0.200
LOW	0.040	0.220	0.050	0.690	0.250	0.030	0.040	0.225	2.38	0.050	0.000	0.000	0.100	0.310	0.360
HIGH	0.210	0.500	0.110	2.975	0.955	0.045	0.630	0.750	5.19	0.240	0.000	0.480	0.230	0.940	1.000

PIGFISH ORTHOPRISTIS CHRYSOPTERA 073017 AREA- SOUTH ATLANTIC SITE- J4 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	12	0.207	0.008	0.191	0.214
WEIGHT	12	0.149	0.010	0.125	0.164

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0011	0012	0012	0011	0012	0012	0012	0012	0012	0012	0012	0011	0012	0010
N DET.	0000	0000	0000	0001	0000	0001	0000	0000	0000	0000	0005	0006	0000	0002	0000
MEAN	0.117	0.587	0.087	2.549	0.420	0.053	0.297	0.291	5.32	0.358	0.270	0.445	0.140	0.820	0.595
S. D.	0.046	0.252	0.022	1.612	0.178	0.019	0.080	0.141	1.83	0.140	0.275	0.420	0.052	0.358	0.185
LOW	0.010	0.250	0.060	1.212	0.240	0.020	0.115	0.060	1.50	0.160	0.090	0.060	0.050	0.250	0.300
HIGH	0.170	1.005	0.110	6.550	0.760	0.090	0.410	0.520	7.68	0.640	0.870	1.205	0.230	1.405	1.000

HERRING, BLUEBACK ALOSA AESTIVALIS 078001 AREA- NORTH ATLANTIC SITE- N2 WHOLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.235	0.000	0.235	0.235
WEIGHT	1	0.184	0.000	0.184	0.184

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.000	0.500	0.050	2.565	0.620	0.030	0.060	0.880	6.44	0.290	0.000	0.190	0.530	1.000	0.560
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.500	0.050	2.565	0.620	0.030	0.060	0.880	6.44	0.290	0.000	0.190	0.530	1.000	0.560

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                                                TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   MF17
                                                IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                                BY TISSUE AND LOCATION

ALEWIFE                                ALOSA PSEUDOHARENGUS                 078005    AREA- NORTH ATLANTIC       SITE-       MUSCLE

ENGTH       NUM    1   MEAN           0.268    S. D.       0.000   LOW       0.268    HIGH          0.268
WEIGHT      NUM    1   MEAN           0.284    S. D.       0.000   LOW       0.284    HIGH          0.284
            MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
              PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER        0001     0001    0001    0001     0001    0001    0001     0001    0001     0001      0001    0001     0001    0001      0001
N DET.        0000     0000    0000    0000     0000    0001    0000     0000    0000     0000      0001    0001     0000    0001      0000
MEAN         0.065    0.490   0.075   2.950    0.510   0.000   0.166    0.730    5.00    0.340     0.000   0.000    0.500   0.000     0.325
S. D.        0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000    0.00    0.000     0.000   0.000    0.000   0.000     0.000
LOW          0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000    0.00    0.000     0.000   0.000    0.000   0.000     0.000
HIGH         0.065    0.490   0.075   2.950    0.510   0.000   0.166    0.730    5.00    0.340     0.000   0.000    0.500   0.000     0.325

ALEWIFE                                ALOSA PSEUDOHARENGUS                 078005    AREA- NORTH ATLANTIC       SITE- F9    MUSCLE

LENGTH      NUM    1   MEAN           0.266    S. D.       0.000   LOW       0.266    HIGH          0.266
WEIGHT      NUM    0   MEAN           0.000    S. D.       0.000   LOW       0.000    HIGH          0.000
            MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
              PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER        0001     0001    0001    0001     0001    0001    0001     0001    0001     0001      0001    0001     0001    0001      0001
N DET.        0001     0000    0000    0000     0000    0000    0001     0000    0000     0000      0001    0001     0000    0000      0000
MEAN         0.000    0.750   0.130   5.850    0.670   0.030   0.000    0.750    5.50    0.260     0.000   0.000    0.740   0.940     0.590
S. D.        0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000    0.00    0.000     0.000   0.000    0.000   0.000     0.000
LOW          0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000    0.00    0.000     0.000   0.000    0.000   0.000     0.000
HIGH         0.000    0.750   0.130   5.850    0.670   0.030   0.000    0.750    5.50    0.260     0.000   0.000    0.740   0.940     0.590

ALEWIFE                                ALOSA PSEUDOHARENGUS                 078005    AREA- NORTH ATLANTIC       SITE- I7    MUSCLE

LENGTH      NUM   26   MEAN           0.213    S. D.       0.011   LOW       0.190    HIGH          0.233
WEIGHT      NUM   26   MEAN           0.111    S. D.       0.014   LOW       0.087    HIGH          0.139
            MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
              PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER        0026     0026    0026    0026     0024    0026    0026     0026    0026     0026      0026    0026     0026    0026      0025
N DET.        0008     0000    0000    0000     0000    0000    0000     0000    0000     0000      0020    0019     0000    0000      0000
MEAN         0.044    0.577   0.068   3.365    0.417   0.045   0.203    0.691    6.26    0.235     0.108   0.200    0.339   0.757     0.718
S. D.        0.030    0.216   0.022   1.241    0.160   0.017   0.099    0.272    1.63    0.050     0.064   0.083    0.119   0.197     0.178
LOW          0.020    0.250   0.040   1.050    0.130   0.010   0.090    0.125    3.62    0.135     0.060   0.090    0.140   0.405     0.440
HIGH         0.125    1.190   0.130   5.300    0.800   0.080   0.500    1.310   10.69    0.380     0.190   0.310    0.610   1.190     1.250

ALEWIFE                                ALOSA PSEUDOHARENGUS                 078005    AREA- NORTH ATLANTIC       SITE- J5    MUSCLE

LENGTH      NUM    3   MEAN           0.224    S. D.       0.021   LOW       0.212    HIGH          0.249
WEIGHT      NUM    3   MEAN           0.144    S. D.       0.042   LOW       0.108    HIGH          0.191
            MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
              PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER        0003     0003    0003    0003     0003    0003    0003     0003    0003     0003      0003    0003     0003    0003      0003
N DET.        0001     0000    0000    0000     0000    0000    0000     0000    0000     0000      0003    0002     0000    0000      0000
MEAN         0.028    0.552   0.075   3.614    0.427   0.047   0.138    0.752    6.35    0.215     0.000   0.410    0.522   0.645     0.618
S. D.        0.011    0.224   0.018   0.859    0.090   0.012   0.041    0.285    1.48    0.031     0.000   0.000    0.169   0.219     0.118
LOW          0.020    0.405   0.055   2.655    0.340   0.040   0.110    0.425    4.93    0.180     0.000   0.000    0.385   0.440     0.500
HIGH         0.035    0.810   0.090   4.312    0.520   0.060   0.185    0.950    7.88    0.240     0.000   0.410    0.710   0.875     0.735

ALEWIFE                                ALOSA PSEUDOHARENGUS                 078005    AREA- NORTH ATLANTIC       SITE- J8    MUSCLE

LENGTH      NUM    1   MEAN           0.213    S. D.       0.000   LOW       0.213    HIGH          0.213
WEIGHT      NUM    0   MEAN           0.000    S. D.       0.000   LOW       0.000    HIGH          0.000
            MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
              PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER        0001     0001    0001    0001     0001    0001    0001     0001    0001     0001      0001    0001     0001    0001      0001
N DET.        0001     0000    0000    0000     0000    0000    0000     0000    0000     0000      0001    0001     0000    0000      0000
MEAN         0.000    0.370   0.060   3.000    0.780   0.070   0.120    0.700    8.69    0.260     0.000   0.000    0.150   1.190     0.840
S. D.        0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000    0.00    0.000     0.000   0.000    0.000   0.000     0.000
LOW          0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000    0.00    0.000     0.000   0.000    0.000   0.000     0.000
HIGH         0.000    0.370   0.060   3.000    0.780   0.070   0.120    0.700    8.69    0.260     0.000   0.000    0.150   1.190     0.840

ALEWIFE                                ALOSA PSEUDOHARENGUS                 078005    AREA- NORTH ATLANTIC       SITE- J9    MUSCLE

LENGTH      NUM    1   MEAN           0.264    S. D.       0.000   LOW       0.264    HIGH          0.264
WEIGHT      NUM    0   MEAN           0.000    S. D.       0.000   LOW       0.000    HIGH          0.000
            MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
              PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER        0001     0001    0001    0001     0001    0001    0001     0001    0001     0001      0001    0001     0001    0001      0001
N DET.        0000     0000    0000    0000     0000    0000    0000     0000    0000     0000      0000    0001     0000    0000      0000
MEAN         0.080    0.720   0.065   4.725    0.635   0.035   0.175    0.305    5.88    0.200     0.060   0.000    0.460   1.095     0.745
S. D.        0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000    0.00    0.000     0.000   0.000    0.000   0.000     0.000
LOW          0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000    0.00    0.000     0.000   0.000    0.000   0.000     0.000
HIGH         0.080    0.720   0.065   4.725    0.635   0.035   0.175    0.305    5.88    0.200     0.060   0.000    0.460   1.095     0.745

ALEWIFE                                ALOSA PSEUDOHARENGUS                 078005    AREA- NORTH ATLANTIC       SITE- K1    MUSCLE

LENGTH      NUM    1   MEAN           0.266    S. D.       0.000   LOW       0.266    HIGH          0.266
WEIGHT      NUM    1   MEAN           0.219    S. D.       0.000   LOW       0.219    HIGH          0.219
            MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB VANADIUM   MANG  ANTIMONY    TIN
              PPM      PPM     PPM     PPM      PPM     PPM     PPM      PPM     PPM      PPM       PPM     PPM      PPM     PPM       PPM

NUMBER        0001     0001    0001    0001     0001    0001    0001     0001    0001     0001      0001    0001     0001    0001      0001
N DET.        0000     0000    0000    0000     0000    0000    0000     0000    0000     0000      0001    0001     0000    0000      0000
MEAN         0.340    0.520   0.060   4.966    0.385   0.040   0.220    0.775    5.34    0.165     0.000   0.000    0.315   0.785     0.645
S. D.        0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000    0.00    0.000     0.000   0.000    0.000   0.000     0.000
LOW          0.000    0.000   0.000   0.000    0.000   0.000   0.000    0.000    0.00    0.000     0.000   0.000    0.000   0.000     0.000
HIGH         0.340    0.520   0.060   4.966    0.385   0.040   0.220    0.775    5.34    0.165     0.000   0.000    0.315   0.785     0.645
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

ALEWIFE ALOSA PSEUDOHARENGUS 078005 AREA- NORTH ATLANTIC SITE- K2 MUSCLE

LENGTH NUM 1 MEAN 0.244 S. D. 0.000 LOW 0.244 HIGH 0.244
WEIGHT NUM 1 MEAN 0.217 S. D. 0.000 LOW 0.217 HIGH 0.217

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.050	0.530	0.000	12.395	0.670	0.000	0.370	0.980	5.53	0.390	0.000	0.000	0.250	1.950	0.400
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.050	0.530	0.000	12.395	0.670	0.000	0.370	0.980	5.53	0.390	0.000	0.000	0.250	1.950	0.400

ALEWIFE ALOSA PSEUDOHARENGUS 078005 AREA- NORTH ATLANTIC SITE- K3 MUSCLE

LENGTH NUM 4 MEAN 0.218 S. D. 0.031 LOW 0.172 HIGH 0.239
WEIGHT NUM 4 MEAN 0.135 S. D. 0.050 LOW 0.063 HIGH 0.180

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0003	0004	0004	0004	0004	0003	0004	0004	0003	0004	0004
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0003	0000	0001	0000
MEAN	0.035	0.479	0.336	3.325	0.645	0.035	0.145	1.083	6.73	0.237	0.000	0.250	0.438	0.593	0.619
S. D.	0.021	0.047	0.319	1.049	0.122	0.010	0.075	0.398	0.51	0.006	0.000	0.000	0.063	0.199	0.146
LOW	0.020	0.440	0.045	2.300	0.505	0.030	0.070	0.620	6.31	0.230	0.000	0.000	0.390	0.370	0.485
HIGH	0.050	0.535	0.660	4.650	0.730	0.050	0.250	1.590	7.41	0.240	0.000	0.250	0.510	0.750	0.750

ALEWIFE ALOSA PSEUDOHARENGUS 078005 AREA- NORTH ATLANTIC SITE- N2 WHOLE

LENGTH NUM 4 MEAN 0.156 S. D. 0.058 LOW 0.116 HIGH 0.242
WEIGHT NUM 4 MEAN 0.061 S. D. 0.073 LOW 0.020 HIGH 0.171

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.115	0.940	0.110	3.721	0.716	0.093	0.265	0.811	15.47	0.331	0.312	0.470	1.783	1.568	1.698
S. D.	0.000	0.398	0.045	0.911	0.213	0.026	0.130	0.068	7.05	0.101	0.080	0.079	0.991	0.662	0.966
LOW	0.000	0.470	0.050	2.800	0.500	0.055	0.095	0.750	5.92	0.195	0.220	0.410	0.430	0.670	0.670
HIGH	0.115	1.400	0.160	4.600	1.000	0.115	0.405	0.880	21.10	0.430	0.370	0.560	2.700	2.190	3.000

ALEWIFE ALOSA PSEUDOHARENGUS 078005 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

LENGTH NUM 1 MEAN 0.249 S. D. 0.000 LOW 0.249 HIGH 0.249
WEIGHT NUM 1 MEAN 0.263 S. D. 0.000 LOW 0.263 HIGH 0.263

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	0.050	0.200	0.000	2.900	0.290	0.000	0.200	0.750	4.28	0.360	0.140	0.000	0.320	0.000	0.350
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.050	0.200	0.000	2.900	0.290	0.000	0.200	0.750	4.28	0.360	0.140	0.000	0.320	0.000	0.350

ALEWIFE ALOSA PSEUDOHARENGUS 078005 AREA- NORTH ATLANTIC SITE- P1 MUSCLE

LENGTH NUM 3 MEAN 0.272 S. D. 0.013 LOW 0.260 HIGH 0.286
WEIGHT NUM 1 MEAN 0.235 S. D. 0.000 LOW 0.235 HIGH 0.235

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.058	0.632	0.077	3.962	0.367	0.039	0.189	0.869	6.07	0.255	0.190	0.470	0.272	0.888	0.554
S. D.	0.031	0.395	0.021	0.631	0.085	0.010	0.105	0.289	0.50	0.063	0.000	0.226	0.070	0.228	0.224
LOW	0.036	0.370	0.060	3.237	0.280	0.030	0.126	0.630	5.50	0.190	0.000	0.310	0.200	0.630	0.310
HIGH	0.080	1.086	0.100	4.390	0.450	0.050	0.310	1.190	6.37	0.316	0.190	0.630	0.340	1.063	0.750

SHAD, AMERICAN ALOSA SAPIDISSIMA 078006 AREA- NORTH ATLANTIC SITE- K1 MUSCLE

LENGTH NUM 1 MEAN 0.450 S. D. 0.000 LOW 0.450 HIGH 0.450
WEIGHT NUM 1 MEAN 1.475 S. D. 0.000 LOW 1.475 HIGH 1.475

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.130	0.485	0.060	5.233	0.925	0.035	0.060	0.660	3.69	0.195	0.000	0.000	0.295	0.780	0.720
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.130	0.485	0.060	5.233	0.925	0.035	0.060	0.660	3.69	0.195	0.000	0.000	0.295	0.780	0.720

SHAD, AMERICAN ALOSA SAPIDISSIMA 078006 AREA- NORTH ATLANTIC SITE- M5 MUSCLE

LENGTH NUM 25 MEAN 0.467 S. D. 0.033 LOW 0.405 HIGH 0.510
WEIGHT NUM 25 MEAN 1.807 S. D. 0.416 LOW 1.100 HIGH 2.430

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0026	0026	0026	0026	0026	0026	0025	0026	0025	0026	0026	0026	0026	0026	0026
N DET.	0020	0000	0000	0000	0000	0001	0000	0000	0000	0000	0024	0025	0000	0026	0000
MEAN	0.087	0.337	0.059	4.002	0.405	0.025	0.212	0.621	3.31	0.220	0.145	0.130	0.261	0.000	0.568
S. D.	0.088	0.134	0.012	1.539	0.186	0.008	0.129	0.303	0.38	0.054	0.021	0.000	0.089	0.000	0.161
LOW	0.020	0.130	0.040	1.825	0.050	0.010	0.060	0.140	2.69	0.080	0.130	0.000	0.130	0.000	0.380
HIGH	0.220	0.630	0.080	8.950	0.830	0.040	0.515	1.130	4.13	0.310	0.160	0.130	0.510	0.000	0.940

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

SHAD, AMERICAN ALOSA SAPIDISSIMA 078006 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

LENGTH	NUM	1	MEAN	0.450	S. D.	0.000	LOW	0.450	HIGH	0.450
WEIGHT	NUM	1	MEAN	1.589	S. D.	0.000	LOW	1.589	HIGH	1.589

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.000	0.560	0.050	2.975	0.060	0.040	0.180	0.915	3.72	0.230	0.000	0.000	0.210	0.750	0.390
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.560	0.050	2.975	0.060	0.040	0.180	0.915	3.72	0.230	0.000	0.000	0.210	0.750	0.390

SHAD, AMERICAN ALOSA SAPIDISSIMA 078006 AREA- PACIFIC NORTHWEST SITE- G9 MUSCLE

LENGTH	NUM	2	MEAN	0.438	S. D.	0.025	LOW	0.420	HIGH	0.455
WEIGHT	NUM	2	MEAN	1.192	S. D.	0.081	LOW	1.135	HIGH	1.249

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0001	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.010	0.443	0.040	3.885	0.533	0.040	0.085	0.575	3.28	0.234	0.000	0.000	0.390	1.380	0.863
S. D.	0.000	0.160	0.000	1.591	0.011	0.000	0.064	0.325	0.40	0.023	0.000	0.000	0.092	0.000	0.336
LOW	0.000	0.330	0.000	2.760	0.525	0.000	0.040	0.345	3.00	0.217	0.000	0.000	0.325	0.000	0.625
HIGH	0.010	0.556	0.040	5.010	0.540	0.040	0.130	0.805	3.56	0.250	0.000	0.000	0.455	1.380	1.100

SHAD, AMERICAN ALOSA SAPIDISSIMA 078006 AREA- PACIFIC NORTHWEST SITE- I7 MUSCLE

LENGTH	NUM	2	MEAN	0.278	S. D.	0.095	LOW	0.210	HIGH	0.345
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.075	0.375	0.050	3.797	0.623	0.040	0.153	0.805	3.95	0.210	0.090	0.060	0.280	0.563	0.563
S. D.	0.000	0.085	0.000	0.467	0.025	0.007	0.046	0.057	0.07	0.042	0.000	0.000	0.148	0.088	0.046
LOW	0.075	0.315	0.050	3.466	0.605	0.035	0.120	0.765	3.90	0.180	0.000	0.000	0.175	0.500	0.530
HIGH	0.075	0.435	0.050	4.127	0.640	0.045	0.185	0.845	4.00	0.240	0.090	0.060	0.385	0.625	0.595

SHAD, AMERICAN ALOSA SAPIDISSIMA 078006 AREA- PACIFIC NORTHWEST SITE- N8 MUSCLE

LENGTH	NUM	15	MEAN	0.414	S. D.	0.028	LOW	0.350	HIGH	0.470
WEIGHT	NUM	10	MEAN	0.893	S. D.	0.166	LOW	0.638	HIGH	1.136

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0015
N DET.	0007	0000	0000	0000	0000	0000	0002	0000	0000	0000	0013	0014	0000	0000	0000
MEAN	0.057	0.549	0.072	2.809	0.630	0.037	0.196	0.626	4.23	0.229	0.088	0.265	0.409	0.901	0.584
S. D.	0.037	0.174	0.021	1.679	0.216	0.008	0.132	0.164	0.56	0.050	0.049	0.064	0.080	0.258	0.093
LOW	0.020	0.375	0.050	0.765	0.360	0.020	0.060	0.250	3.19	0.110	0.060	0.220	0.295	0.625	0.380
HIGH	0.110	0.940	0.120	7.250	1.210	0.050	0.470	0.880	5.13	0.290	0.145	0.310	0.585	1.440	0.720

SHAD, AMERICAN ALOSA SAPIDISSIMA 078006 AREA- PACIFIC NORTHWEST SITE- R2 MUSCLE

LENGTH	NUM	1	MEAN	0.376	S. D.	0.000	LOW	0.376	HIGH	0.376
WEIGHT	NUM	1	MEAN	0.794	S. D.	0.000	LOW	0.794	HIGH	0.794

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.050	0.446	0.145	3.800	0.440	0.040	0.105	0.820	5.75	0.215	0.000	0.000	0.465	0.000	0.640
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.050	0.446	0.145	3.800	0.440	0.040	0.105	0.820	5.75	0.215	0.000	0.000	0.465	0.000	0.640

SHAD, AMERICAN ALOSA SAPIDISSIMA 078006 AREA- PACIFIC NORTHWEST SITE- R5 MUSCLE

LENGTH	NUM	3	MEAN	0.370	S. D.	0.000	LOW	0.370	HIGH	0.370
WEIGHT	NUM	10	MEAN	1.334	S. D.	0.000	LOW	1.334	HIGH	1.334

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0002	0000	0003	0000	0000	0003	0000	0000	0000	0001	0007	0004	0000	0005	0001
MEAN	0.028	0.535	0.064	3.515	0.459	0.029	0.133	0.664	3.47	0.286	0.097	0.220	0.263	0.788	0.538
S. D.	0.014	0.358	0.028	2.297	0.146	0.012	0.090	0.214	1.24	0.228	0.035	0.112	0.121	0.279	0.106
LOW	0.010	0.010	0.030	1.415	0.320	0.010	0.020	0.360	1.70	0.080	0.060	0.090	0.090	0.350	0.415
HIGH	0.040	1.310	0.110	7.900	0.685	0.045	0.305	1.000	6.05	0.790	0.130	0.400	0.465	1.060	0.750

SHAD, AMERICAN ALOSA SAPIDISSIMA 078006 AREA- PACIFIC NORTHWEST SITE- R8 MUSCLE

LENGTH	NUM	1	MEAN	0.422	S. D.	0.000	LOW	0.422	HIGH	0.422
WEIGHT	NUM	1	MEAN	1.476	S. D.	0.000	LOW	1.476	HIGH	1.476

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.110	0.678	0.050	3.710	0.725	0.020	0.324	0.433	4.80	0.180	0.000	0.000	0.230	0.450	0.726
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.110	0.678	0.050	3.710	0.725	0.020	0.324	0.433	4.80	0.180	0.000	0.000	0.230	0.450	0.726

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

MENHADEN, GULF   BREVOORTIA PATRONUS   078008   AREA- GULF   SITE- B7   WHOLE

LENGTH	NUM	6	MEAN	0.228	S. D.	0.008	LOW	0.214	HIGH	0.237
WEIGHT	NUM	6	MEAN	0.265	S. D.	0.030	LOW	0.213	HIGH	0.287

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0001	0000	0000
MEAN	0.138	3.147	0.259	6.218	0.804	0.222	1.197	0.839	35.14	1.436	0.408	2.589	12.810	2.184	1.663
S. D.	0.169	0.719	0.118	1.574	0.111	0.070	0.296	0.203	30.87	0.448	0.142	1.187	3.058	0.914	0.951
LOW	0.010	1.850	0.180	4.670	0.680	0.146	0.756	0.550	18.14	0.966	0.240	1.340	9.576	0.740	1.030
HIGH	0.330	4.023	0.480	8.380	1.010	0.310	1.605	1.075	97.50	2.115	0.585	4.380	17.535	3.500	3.500

MENHADEN, GULF   BREVOORTIA PATRONUS   078008   AREA- GULF   SITE- B7   GUTTED

LENGTH	NUM	9	MEAN	0.231	S. D.	0.005	LOW	0.225	HIGH	0.242
WEIGHT	NUM	9	MEAN	0.269	S. D.	0.010	LOW	0.252	HIGH	0.283

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0009	0009	0007	0007	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000
MEAN	0.020	2.424	0.259	7.124	0.662	0.203	1.402	0.766	24.39	1.738	0.388	2.051	5.725	2.570	1.769
S. D.	0.008	0.793	0.116	4.394	0.251	0.069	0.676	0.288	5.88	0.637	0.136	0.946	1.246	0.435	0.737
LOW	0.010	0.750	0.120	3.350	0.330	0.100	0.360	0.360	18.37	0.710	0.245	1.000	3.810	1.880	0.880
HIGH	0.030	3.686	0.460	16.400	0.940	0.310	2.453	1.210	33.93	2.515	0.665	3.640	7.880	3.210	3.130

MENHADEN, GULF   BREVOORTIA PATRONUS   078008   AREA- GULF   SITE- B8   MUSCLE

LENGTH	NUM	3	MEAN	0.145	S. D.	0.000	LOW	0.145	HIGH	0.145
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0000	0000
MEAN	0.000	0.710	0.067	3.317	0.373	0.018	0.243	0.800	5.68	0.293	0.000	0.375	0.398	0.722	0.720
S. D.	0.000	0.505	0.025	1.007	0.172	0.014	0.119	0.684	3.40	0.170	0.000	0.000	0.377	0.344	0.177
LOW	0.000	0.250	0.040	2.250	0.250	0.010	0.160	0.300	2.69	0.190	0.000	0.000	0.110	0.395	0.560
HIGH	0.000	1.250	0.090	4.250	0.570	0.035	0.380	1.580	9.38	0.490	0.000	0.375	0.825	1.080	0.910

MENHADEN, GULF   BREVOORTIA PATRONUS   078008   AREA- GULF   SITE- D5   WHOLE

LENGTH	NUM	22	MEAN	0.221	S. D.	0.011	LOW	0.204	HIGH	0.255
WEIGHT	NUM	22	MEAN	0.231	S. D.	0.038	LOW	0.181	HIGH	0.349

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0022	0022	0022	0022	0022	0022	0022	0022	0021	0022	0022	0022	0022	0022	0021
N DET.	0006	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0003	0000
MEAN	0.053	2.144	0.166	4.047	0.902	0.143	0.568	0.765	20.64	0.788	0.455	2.629	8.372	2.015	1.799
S. D.	0.053	0.765	0.089	1.843	0.261	0.045	0.216	0.270	7.62	0.501	0.222	1.408	3.721	0.559	0.543
LOW	0.010	0.775	0.090	2.000	0.520	0.030	0.270	0.190	11.87	0.400	0.220	1.000	2.790	0.960	0.900
HIGH	0.235	3.440	0.430	9.160	1.475	0.230	1.310	1.400	41.87	2.640	0.970	7.060	17.140	3.350	3.190

MENHADEN, GULF   BREVOORTIA PATRONUS   078008   AREA- GULF   SITE- D5   MUSCLE

LENGTH	NUM	20	MEAN	0.197	S. D.	0.017	LOW	0.179	HIGH	0.245
WEIGHT	NUM	20	MEAN	0.188	S. D.	0.042	LOW	0.139	HIGH	0.238

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0019	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020	0020
N DET.	0016	0000	0000	0000	0000	0000	0000	0000	0000	0000	0017	0003	0000	0003	0000
MEAN	0.058	0.511	0.086	2.364	0.559	0.045	0.258	1.024	5.30	0.258	0.250	0.446	0.743	0.713	0.868
S. D.	0.057	0.160	0.038	1.464	0.217	0.014	0.253	0.313	1.60	0.134	0.000	0.271	0.176	0.274	0.311
LOW	0.020	0.310	0.040	0.690	0.090	0.020	0.060	0.465	2.75	0.090	0.250	0.190	0.460	0.245	0.505
HIGH	0.140	0.880	0.210	5.050	0.900	0.080	1.000	1.750	9.19	0.750	0.250	1.130	1.000	1.130	1.560

MENHADEN, GULF   BREVOORTIA PATRONUS   078008   AREA- GULF   SITE- E5   MUSCLE

LENGTH	NUM	20	MEAN	0.282	S. D.	0.020	LOW	0.252	HIGH	0.322
WEIGHT	NUM	20	MEAN	0.293	S. D.	0.040	LOW	0.243	HIGH	0.370

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0019	0019	0020	0020	0020	0020	0020	0020	0019	0020	0020	0019
N DET.	0010	0000	0002	0000	0000	0005	0000	0000	0000	0000	0012	0005	0000	0003	0000
MEAN	0.057	0.737	0.094	5.459	0.720	0.109	0.236	0.704	7.59	0.348	0.285	0.498	0.617	0.899	0.748
S. D.	0.034	0.302	0.048	2.072	0.287	0.262	0.116	0.264	2.06	0.211	0.215	0.285	0.246	0.274	0.492
LOW	0.020	0.380	0.030	2.650	0.100	0.010	0.080	0.390	5.00	0.130	0.130	0.190	0.290	0.360	0.380
HIGH	0.110	1.430	0.210	9.000	1.250	1.055	0.560	1.340	13.57	1.000	0.720	1.130	1.110	1.440	2.500

MENHADEN, GULF   BREVOORTIA PATRONUS   078008   AREA- GULF   SITE- G5   MUSCLE

LENGTH	NUM	4	MEAN	0.206	S. D.	0.006	LOW	0.197	HIGH	0.210
WEIGHT	NUM	4	MEAN	0.269	S. D.	0.012	LOW	0.255	HIGH	0.284

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0000	0000	0000	0000
MEAN	0.020	0.751	0.095	2.748	0.858	0.050	0.304	0.565	7.67	0.248	0.000	0.445	0.620	0.885	0.646
S. D.	0.000	0.342	0.037	1.029	0.493	0.008	0.197	0.149	1.06	0.040	0.000	0.218	0.123	0.230	0.206
LOW	0.000	0.500	0.075	1.500	0.330	0.040	0.180	0.400	6.19	0.190	0.000	0.220	0.445	0.720	0.500
HIGH	0.020	1.250	0.150	4.000	1.515	0.060	0.595	0.740	8.56	0.280	0.000	0.690	0.720	1.220	0.940

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

IENHADEN, GULF   BREVOORTIA PATRONUS   078008   AREA- GULF   SITE- H1   MUSCLE

NGTH NUM 3 MEAN 0.147 S. D. 0.002 LOW 0.145 HIGH 0.149
EIGHT NUM 3 MEAN 0.063 S. D. 0.001 LOW 0.062 HIGH 0.064

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
JMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0001	0000	0000	0000
EAN	0.000	0.897	0.077	3.817	0.488	0.037	0.253	0.690	8.23	0.240	0.000	0.375	0.590	1.023	0.670
S. D.	0.000	0.189	0.021	0.592	0.024	0.012	0.125	0.120	1.15	0.095	0.000	0.262	0.149	0.382	0.131
LOW	0.000	0.690	0.060	3.450	0.470	0.030	0.130	0.570	6.94	0.180	0.000	0.190	0.480	0.690	0.550
HIGH	0.000	1.060	0.100	4.500	0.515	0.050	0.380	0.810	9.13	0.350	0.000	0.560	0.760	1.440	0.810

MENHADEN, YELLOWFIN   BREVOORTIA SMITHI   078009   AREA- GULF   SITE- L5   WHOLE

LENGTH NUM 13 MEAN 0.195 S. D. 0.012 LOW 0.173 HIGH 0.213
WEIGHT NUM 13 MEAN 0.155 S. D. 0.031 LOW 0.101 HIGH 0.196

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0013	0013	0013	0012	0012	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013
DET.	0007	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0001	0000
MEAN	0.093	1.519	0.165	7.808	1.143	0.140	0.439	0.757	17.02	0.582	0.396	1.474	1.135	2.133	1.969
S. D.	0.161	0.463	0.109	4.216	0.742	0.053	0.132	0.176	2.84	0.353	0.123	0.935	0.256	0.493	0.526
LOW	0.010	0.720	0.040	3.400	0.640	0.010	0.195	0.435	13.50	0.150	0.250	0.060	0.730	1.000	0.970
IGH	0.420	2.210	0.495	15.250	3.250	0.215	0.625	1.060	22.50	1.290	0.690	3.950	1.750	3.200	3.000

MENHADEN, ATL.   BREVOORTIA TYRANNUS   078010   AREA- NORTH ATLANTIC   SITE- R2   WHOLE

LENGTH NUM 32 MEAN 0.198 S. D. 0.010 LOW 0.150 HIGH 0.211
WEIGHT NUM 32 MEAN 0.121 S. D. 0.017 LOW 0.053 HIGH 0.148

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0032	0032	0032	0030	0030	0032	0032	0032	0031	0032	0032	0032	0032	0032	0032
N DET.	0024	0000	0000	0001	0000	0000	0000	0001	0000	0000	0002	0002	0000	0003	0000
MEAN	0.074	1.802	0.224	2.930	1.119	0.175	0.742	1.386	18.50	0.968	0.348	1.052	7.258	2.126	1.850
. D.	0.095	0.664	0.233	1.233	0.624	0.077	0.322	0.489	5.47	0.557	0.192	0.576	3.514	1.011	0.808
.OW	0.010	0.380	0.040	1.025	0.350	0.030	0.130	0.350	7.70	0.110	0.100	0.100	0.010	0.130	0.500
IGH	0.270	3.165	1.390	6.455	3.760	0.390	1.350	2.345	34.64	2.250	0.940	2.310	16.665	4.810	3.800

MENHADEN, ATL.   BREVOORTIA TYRANNUS   078010   AREA- NORTH ATLANTIC   SITE- R2   MUSCLE

ENGTH NUM 10 MEAN 0.224 S. D. 0.010 LOW 0.213 HIGH 0.246
EIGHT NUM 10 MEAN 0.168 S. D. 0.027 LOW 0.141 HIGH 0.222

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010
N DET.	0008	0000	0000	0000	0000	0000	0000	0000	0000	0000	0007	0006	0000	0009	0000
EAN	0.020	0.535	0.071	2.049	0.767	0.045	0.271	1.097	6.77	0.357	0.217	0.245	0.784	0.340	0.599
S. D.	0.000	0.165	0.017	1.293	0.222	0.010	0.139	0.470	0.95	0.202	0.029	0.082	0.294	0.000	0.103
.OW	0.020	0.250	0.030	0.500	0.450	0.030	0.090	0.310	5.94	0.160	0.200	0.140	0.260	0.000	0.470
HIGH	0.020	0.690	0.090	5.000	1.150	0.060	0.500	1.810	9.13	0.860	0.250	0.310	1.400	0.340	0.750

MENHADEN, ATL.   BREVOORTIA TYRANNUS   078010   AREA- NORTH ATLANTIC   SITE- R3   WHOLE

LENGTH NUM 23 MEAN 0.212 S. D. 0.017 LOW 0.197 HIGH 0.280
WEIGHT NUM 23 MEAN 0.154 S. D. 0.049 LOW 0.116 HIGH 0.356

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0023	0023	0023	0022	0022	0023	0023	0023	0023	0023	0023	0023	0023	0023	0023
N DET.	0016	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0005	0000
MEAN	0.099	1.820	0.211	3.144	1.074	0.172	0.732	1.468	18.38	0.962	0.340	1.234	6.013	1.943	1.507
S. D.	0.113	0.463	0.117	2.341	0.332	0.076	0.325	0.492	4.81	0.571	0.191	0.643	2.438	0.825	0.559
LOW	0.010	0.810	0.060	0.700	0.563	0.070	0.240	0.710	7.75	0.070	0.100	0.500	1.115	0.180	0.880
HIGH	0.310	2.485	0.430	10.620	2.000	0.340	1.755	2.460	32.50	2.660	0.810	3.250	10.500	3.930	3.000

MENHADEN, ATL.   BREVOORTIA TYRANNUS   078010   AREA- SOUTH ATLANTIC   SITE- C2   WHOLE

LENGTH NUM 46 MEAN 0.208 S. D. 0.058 LOW 0.163 HIGH 0.332
WEIGHT NUM 46 MEAN 0.186 S. D. 0.176 LOW 0.070 HIGH 0.624

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0045	0045	0046	0046	0046	0046	0046	0045	0046	0046	0045	0046	0046	0046	0045
N DET.	0033	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.164	1.664	0.181	5.348	1.006	0.173	0.645	1.100	19.21	0.760	0.445	1.749	3.685	2.181	1.748
S. D.	0.187	0.817	0.090	2.328	0.341	0.070	0.314	0.683	15.60	0.479	0.172	1.086	2.039	0.841	0.558
LOW	0.030	0.440	0.085	1.725	0.400	0.090	0.150	0.380	9.50	0.295	0.220	0.625	1.435	0.500	0.570
HIGH	0.670	3.930	0.530	10.840	2.290	0.390	1.580	3.710	111.41	2.150	0.845	5.285	10.750	4.280	3.750

HERRING, ATL.   CLUPEA HARENGUS HARENGUS   078011   AREA- NORTH ATLANTIC   SITE- I5   WHOLE

LENGTH NUM 2 MEAN 0.234 S. D. 0.028 LOW 0.214 HIGH 0.253
WEIGHT NUM 2 MEAN 0.124 S. D. 0.052 LOW 0.087 HIGH 0.161

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	1.360	0.150	3.238	0.760	0.085	0.285	1.155	16.26	0.425	0.205	0.283	1.143	1.533	1.793
S. D.	0.000	0.594	0.014	0.230	0.127	0.007	0.049	0.219	4.44	0.007	0.064	0.272	0.230	0.223	0.520
LOW	0.000	0.940	0.140	3.075	0.670	0.080	0.250	1.000	13.12	0.420	0.160	0.090	0.980	1.375	1.425
HIGH	0.000	1.780	0.160	3.400	0.850	0.090	0.320	1.310	19.40	0.430	0.250	0.475	1.305	1.690	2.160

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

HERRING, ATL. CLUPEA HARENGUS HARENGUS 078011 AREA- NORTH ATLANTIC SITE- J4 MUSCLE

LENGTH NUM 10 MEAN 0.247 S. D. 0.012 LOW 0.231 HIGH 0.265
WEIGHT NUM 10 MEAN 0.163 S. D. 0.028 LOW 0.133 HIGH 0.234

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	000
N DET.	0009	0000	0000	0000	0001	0000	0001	0000	0000	0000	0008	0007	0000	0005	000
MEAN	0.030	0.553	0.111	2.296	0.546	0.037	0.161	0.621	6.76	0.294	0.285	0.303	0.208	0.822	0.58
S. D.	0.000	0.260	0.084	0.937	0.300	0.008	0.034	0.292	1.86	0.082	0.134	0.068	0.041	0.262	0.109
LOW	0.000	0.310	0.060	0.910	0.180	0.030	0.130	0.225	4.31	0.195	0.190	0.250	0.140	0.470	0.380
HIGH	0.030	1.185	0.340	3.500	1.000	0.050	0.220	1.055	10.25	0.430	0.380	0.380	0.260	1.100	0.700

HERRING, ATL. CLUPEA HARENGUS HARENGUS 078011 AREA- NORTH ATLANTIC SITE- J5 H&G

LENGTH NUM 1 MEAN 0.236 S. D. 0.000 LOW 0.236 HIGH 0.236
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	000
MEAN	0.100	0.905	0.095	2.400	0.850	0.080	0.345	2.345	15.03	0.365	0.265	0.620	0.745	1.295	1.190
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.100	0.905	0.095	2.400	0.850	0.080	0.345	2.345	15.03	0.365	0.265	0.620	0.745	1.295	1.19

HERRING, ATL. CLUPEA HARENGUS HARENGUS 078011 AREA- NORTH ATLANTIC SITE- J7 WHOLE

LENGTH NUM 12 MEAN 0.232 S. D. 0.019 LOW 0.214 HIGH 0.277
WEIGHT NUM 12 MEAN 0.118 S. D. 0.037 LOW 0.088 HIGH 0.214

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012
N DET.	0011	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.050	1.141	0.114	2.596	0.911	0.103	0.505	1.071	16.89	0.399	0.182	0.305	0.951	1.628	1.669
S. D.	0.000	0.346	0.033	1.093	0.187	0.032	0.375	0.476	4.54	0.092	0.096	0.154	0.326	0.369	0.450
LOW	0.000	0.560	0.050	1.430	0.605	0.055	0.190	0.190	10.62	0.240	0.060	0.090	0.390	1.130	0.740
HIGH	0.050	1.665	0.170	4.683	1.130	0.150	1.500	1.810	24.56	0.515	0.375	0.595	1.385	2.315	2.215

HERRING, ATL. CLUPEA HARENGUS HARENGUS 078011 AREA- NORTH ATLANTIC SITE- J8 WHOLE

LENGTH NUM 3 MEAN 0.228 S. D. 0.009 LOW 0.219 HIGH 0.237
WEIGHT NUM 3 MEAN 0.090 S. D. 0.011 LOW 0.079 HIGH 0.101

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.080	1.333	0.147	2.198	0.778	0.085	0.362	1.230	15.97	0.382	0.175	0.387	1.003	1.873	1.540
S. D.	0.014	0.267	0.058	0.351	0.152	0.025	0.068	0.251	4.56	0.063	0.015	0.068	0.221	0.180	0.297
LOW	0.070	1.030	0.080	1.950	0.605	0.060	0.315	0.970	10.78	0.320	0.160	0.310	0.760	1.690	1.310
HIGH	0.090	1.530	0.180	2.600	0.890	0.110	0.440	1.470	19.37	0.445	0.190	0.440	1.190	2.050	1.875

HERRING, ATL. CLUPEA HARENGUS HARENGUS 078011 AREA- NORTH ATLANTIC SITE- K1 WHOLE

LENGTH NUM 17 MEAN 0.236 S. D. 0.047 LOW 0.145 HIGH 0.300
WEIGHT NUM 17 MEAN 0.189 S. D. 0.112 LOW 0.040 HIGH 0.394

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017
N DET.	0016	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0004	0000	0000	0000
MEAN	0.020	0.919	0.106	2.011	1.069	0.089	0.269	1.232	16.47	0.373	0.211	0.314	1.126	1.291	1.410
S. D.	0.000	0.178	0.020	0.738	0.275	0.019	0.120	0.588	3.99	0.056	0.081	0.202	0.303	0.339	0.235
LOW	0.000	0.625	0.060	0.775	0.430	0.050	0.125	0.150	11.88	0.290	0.090	0.120	0.650	0.500	1.000
HIGH	0.020	1.250	0.150	3.212	1.600	0.110	0.630	2.880	29.60	0.490	0.330	0.750	1.540	1.880	1.810

HERRING, ATL. CLUPEA HARENGUS HARENGUS 078011 AREA- NORTH ATLANTIC SITE- K1 HEADED

LENGTH NUM 6 MEAN 0.274 S. D. 0.043 LOW 0.203 HIGH 0.310
WEIGHT NUM 6 MEAN 0.229 S. D. 0.101 LOW 0.075 HIGH 0.326

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.040	0.816	0.097	2.891	0.783	0.061	0.203	1.303	12.21	0.309	0.168	0.346	0.831	1.030	1.308
S. D.	0.000	0.159	0.009	1.974	0.232	0.017	0.056	0.469	2.45	0.107	0.059	0.108	0.278	0.323	0.273
LOW	0.000	0.630	0.085	1.300	0.485	0.030	0.120	0.855	8.19	0.140	0.120	0.190	0.480	0.620	0.880
HIGH	0.040	1.035	0.110	6.500	1.100	0.080	0.250	2.160	15.63	0.430	0.250	0.440	1.280	1.500	1.685

HERRING, ATL. CLUPEA HARENGUS HARENGUS 078011 AREA- NORTH ATLANTIC SITE- K2 MUSCLE

LENGTH NUM 2 MEAN 0.274 S. D. 0.011 LOW 0.266 HIGH 0.282
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.000	0.890	0.113	3.371	0.813	0.063	0.183	1.028	16.24	0.325	0.125	0.345	0.945	0.845	1.205
S. D.	0.000	0.156	0.004	3.683	0.166	0.004	0.004	0.400	3.56	0.049	0.000	0.134	0.233	0.219	0.247
LOW	0.000	0.780	0.110	0.766	0.695	0.060	0.180	0.745	13.72	0.290	0.000	0.250	0.780	0.690	1.030
HIGH	0.000	1.000	0.115	5.975	0.930	0.065	0.185	1.310	18.75	0.360	0.125	0.440	1.110	1.000	1.380

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

ERRING, ATL. CLUPEA HARENGUS HARENGUS 078011 AREA- NORTH ATLANTIC SITE- 02 WHOLE

NGTH NUM 29 MEAN 0.256 S. D. 0.034 LOW 0.200 HIGH 0.320
IGHT NUM 29 MEAN 0.181 S. D. 0.130 LOW 0.063 HIGH 0.781

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
IBER	0029	0029	0029	0029	0028	0029	0029	0029	0029	0029	0029	0029	0029	0029	0029
DET.	0014	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
AN	0.065	1.170	0.139	2.560	0.764	0.103	0.424	1.055	17.42	0.397	0.246	0.518	0.949	1.572	1.672
D.	0.056	0.276	0.092	1.097	0.274	0.024	0.242	0.227	3.62	0.068	0.129	0.272	0.276	0.386	0.490
LOW	0.020	0.560	0.070	0.950	0.280	0.060	0.170	0.470	10.62	0.275	0.060	0.095	0.070	0.640	0.690
HIGH	0.180	1.810	0.480	4.900	1.415	0.180	1.060	1.570	26.25	0.540	0.620	1.220	1.340	2.660	3.135

ERRING, ATL. CLUPEA HARENGUS HARENGUS 078011 AREA- NORTH ATLANTIC SITE- 03 H&G

LENGTH NUM 1 MEAN 0.219 S. D. 0.000 LOW 0.219 HIGH 0.219
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
MBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
DET.	0000	0000	0000	0000	0000	0000	0000	000(	0000	0000	0001	0000	0000	0000	0000
MEAN	0.130	1.680	0.260	4.000	0.450	0.070	0.130	1.130	13.75	0.410	0.000	0.060	0.760	1.440	0.840
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
GH	0.130	1.680	0.260	4.000	0.450	0.070	0.130	1.130	13.75	0.410	0.000	0.060	0.760	1.440	0.840

IERRING, ATL. CLUPEA HARENGUS HARENGUS 078011 AREA- NORTH ATLANTIC SITE- S1 MUSCLE

LENGTH NUM 12 MEAN 0.252 S. D. 0.029 LOW 0.223 HIGH 0.323
WEIGHT NUM 12 MEAN 0.174 S. D. 0.049 LOW 0.132 HIGH 0.281

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012
N DET.	0008	0000	0000	0000	0000	0000	0000	0000	0000	0000	0008	0010	0000	0009	0000
MEAN	0.035	0.518	0.087	1.753	0.421	0.040	0.214	0.918	6.42	0.254	0.115	0.265	0.279	0.627	0.620
S. D.	0.010	0.350	0.025	0.717	0.203	0.008	0.102	0.388	1.83	0.058	0.064	0.064	0.064	0.323	0.228
OW	0.020	0.190	0.060	0.470	0.090	0.030	0.110	0.430	2.78	0.135	0.060	0.220	0.180	0.440	0.400
IGH	0.040	1.440	0.140	2.750	0.675	0.055	0.500	1.940	8.91	0.340	0.180	0.310	0.395	1.000	1.130

HERRING, PAC. CLUPEA HARENGUS PALLASI 078012 AREA- PACIFIC NORTHWEST SITE- H8 MUSCLE

ENGTH NUM 4 MEAN 0.245 S. D. 0.000 LOW 0.245 HIGH 0.245
EIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0001	0000	0000	0002	0000	0000	0000	0000	0004	0004	0000	0000	0000
EAN	0.098	0.596	0.123	4.259	0.604	0.075	0.269	1.031	7.60	0.305	0.000	0.000	0.565	1.345	0.975
. D.	0.044	0.246	0.061	1.481	0.238	0.049	0.075	0.082	0.55	0.088	0.000	0.000	0.143	0.331	0.266
OW	0.040	0.286	0.070	2.730	0.275	0.040	0.195	0.910	6.87	0.235	0.000	0.000	0.410	1.050	0.675
IGH	0.135	0.825	0.190	6.280	0.835	0.110	0.340	1.090	8.12	0.433	0.000	0.000	0.750	1.750	1.315

HERRING, PAC. CLUPEA HARENGUS PALLASI 078012 AREA- PACIFIC NORTHWEST SITE- H9 MUSCLE

ENGTH NUM 10 MEAN 0.228 S. D. 0.010 LOW 0.210 HIGH 0.240
EIGHT NUM 9 MEAN 0.132 S. D. 0.013 LOW 0.110 HIGH 0.150

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
DET.	0000	0000	0001	0000	0000	0004	0000	0000	0000	0000	0006	0010	0000	0002	0000
EAN	0.055	0.437	0.061	4.265	0.566	0.049	0.171	0.686	4.40	0.232	0.355	0.000	0.364	1.209	0.703
. D.	0.028	0.155	0.036	1.775	0.196	0.014	0.091	0.268	1.29	0.140	0.597	0.000	0.097	0.263	0.244
LOW	0.020	0.170	0.030	1.650	0.350	0.035	0.045	0.350	2.68	0.090	0.050	0.000	0.145	0.940	0.410
HIGH	0.120	0.630	0.140	6.870	0.930	0.070	0.300	1.200	7.14	0.610	1.250	0.000	0.500	1.630	1.125

HERRING, PAC. CLUPEA HARENGUS PALLASI 078012 AREA- ALASKA SITE- L4 WHOLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0020	0020	0020	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020
DET.	0019	0000	0000	0000	0000	0001	0000	0000	0000	0000	0004	0002	0000	0000	0000
MEAN	0.260	1.082	0.128	2.439	0.761	0.087	0.291	1.212	14.13	0.319	0.193	0.441	1.189	1.449	2.463
S. D.	0.000	0.444	0.046	1.296	0.325	0.027	0.141	0.678	3.16	0.108	0.083	0.205	0.345	0.381	0.681
LOW	0.000	0.380	0.040	0.150	0.190	0.040	0.060	0.390	5.00	0.060	0.060	0.190	0.660	0.440	1.200
HIGH	0.260	1.880	0.250	5.200	1.380	0.150	0.690	2.810	19.84	0.460	0.380	1.080	2.060	2.060	3.810

HERRING, PAC. CLUPEA HARENGUS PALLASI 078012 AREA- ALASKA SITE- 04 WHOLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0010	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0003	0000	0000	0000
MEAN	0.000	1.014	0.099	2.665	0.935	0.104	0.251	0.652	14.62	0.334	0.230	0.461	1.417	1.306	2.994
S. D.	0.000	0.290	0.016	1.458	0.223	0.053	0.087	0.302	1.77	0.096	0.093	0.232	0.533	0.359	0.722
OW	0.000	0.750	0.080	1.125	0.660	0.060	0.130	0.280	10.46	0.210	0.145	0.090	0.340	0.625	1.950
HIGH	0.000	1.560	0.130	6.125	1.250	0.240	0.370	1.035	17.63	0.560	0.420	0.770	2.270	1.750	4.750

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES: BY TISSUE AND LOCATION

HERRING, ROUND ETRUMEUS TERES 078015 AREA- NORTH ATLANTIC SITE- N2 H&G, TAILLES

LENGTH NUM 7 MEAN 0.137 S. D. 0.000 LOW 0.137 HIGH 0.137
WEIGHT NUM 7 MEAN 0.028 S. D. 0.001 LOW 0.026 HIGH 0.029

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0006	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	00
N DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000	0000	0001	00
MEAN	0.025	0.913	0.132	1.689	0.919	0.086	0.325	1.587	15.18	0.345	0.178	0.441	0.934	1.357	1.31
S. D.	0.007	0.203	0.029	0.906	0.272	0.010	0.249	0.374	1.46	0.109	0.066	0.133	0.236	0.323	0.413
LOW	0.020	0.660	0.090	0.745	0.630	0.070	0.190	0.815	13.75	0.240	0.130	0.285	0.630	0.750	0.925
HIGH	0.030	1.250	0.180	2.783	1.385	0.100	0.875	1.940	18.03	0.495	0.250	0.630	1.385	1.690	1.940

HERRING, ROUND ETRUMEUS TERES 078015 AREA- NORTH ATLANTIC SITE- N7 H&G, TAILLES

LENGTH NUM 10 MEAN 0.145 S. D. 0.002 LOW 0.140 HIGH 0.145
WEIGHT NUM 10 MEAN 0.043 S. D. 0.002 LOW 0.040 HIGH 0.046

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	001
N DET.	0006	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000	0000	0008	000
MEAN	0.065	0.747	0.158	1.970	0.854	0.083	0.319	1.508	13.39	0.389	0.286	0.536	0.907	1.440	0.945
S. D.	0.053	0.165	0.047	0.870	0.394	0.023	0.171	0.413	2.63	0.089	0.192	0.108	0.314	0.000	0.453
LOW	0.020	0.500	0.110	0.890	0.130	0.050	0.185	0.800	8.25	0.240	0.130	0.410	0.470	1.440	0.140
HIGH	0.140	0.940	0.270	4.000	1.380	0.130	0.620	2.340	16.92	0.510	0.700	0.700	1.630	1.440	1.97

HERRING, ROUND ETRUMEUS TERES 078015 AREA- NORTH ATLANTIC SITE- N8 H&G, TAILLESS

LENGTH NUM 17 MEAN 0.151 S. D. 0.000 LOW 0.151 HIGH 0.151
WEIGHT NUM 27 MEAN 0.043 S. D. 0.012 LOW 0.029 HIGH 0.057

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0027	0027	0027	0027	0027	0027	0027	0027	0027	0027	0027	0027	0027	0027	0027
N DET.	0021	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0005	0000	0022	0000
MEAN	0.033	0.796	0.163	3.830	1.215	0.075	0.301	1.766	14.38	0.406	0.236	0.379	0.786	0.958	0.962
S. D.	0.024	0.306	0.036	2.162	0.480	0.017	0.166	0.730	2.30	0.095	0.259	0.144	0.216	0.405	0.28
LOW	0.020	0.310	0.095	0.710	0.260	0.050	0.130	0.130	8.13	0.190	0.090	0.170	0.520	0.380	0.47
HIGH	0.080	1.810	0.270	10.650	2.130	0.110	0.880	3.080	18.25	0.630	1.250	0.840	1.285	1.440	1.70

HERRING, ROUND ETRUMEUS TERES 078015 AREA- NORTH ATLANTIC SITE- R6 H&G, TAILLESS

LENGTH NUM 6 MEAN 0.120 S. D. 0.000 LOW 0.120 HIGH 0.120
WEIGHT NUM 6 MEAN 0.019 S. D. 0.001 LOW 0.018 HIGH 0.022

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0006	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000	0000	0002	0000
MEAN	0.000	0.892	0.258	2.935	0.745	0.082	0.343	1.640	15.69	0.377	0.213	0.570	0.885	1.220	1.88
S. D.	0.000	0.613	0.110	1.861	0.504	0.012	0.227	0.475	4.91	0.084	0.045	0.215	0.236	0.259	1.032
LOW	0.000	0.250	0.180	1.010	0.060	0.060	0.100	0.770	8.19	0.260	0.160	0.440	0.630	0.940	0.900
HIGH	0.000	2.060	0.460	6.200	1.150	0.090	0.750	2.190	22.94	0.450	0.250	1.000	1.300	1.440	3.750

RUNNER, BLUE CARANX CRYSOS 079004 AREA- GULF SITE- E5 MUSCLE

LENGTH NUM 28 MEAN 0.303 S. D. 0.050 LOW 0.240 HIGH 0.445
WEIGHT NUM 28 MEAN 0.382 S. D. 0.150 LOW 0.248 HIGH 0.916

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0028	0027	0028	0028	0027	0028	0027	0027	0027	0028	0028	0028	0027	0028	0027
N DET.	0000	0000	0000	0000	0000	0006	0000	0000	0000	0001	0021	0023	0000	0002	0000
MEAN	0.210	0.508	0.094	3.047	0.731	0.039	0.164	0.927	5.62	0.252	0.267	0.350	0.165	0.812	0.568
S. D.	0.104	0.289	0.061	1.454	0.204	0.010	0.116	0.321	1.23	0.121	0.159	0.255	0.056	0.480	0.113
LOW	0.040	0.175	0.040	0.300	0.410	0.020	0.040	0.260	3.78	0.070	0.060	0.200	0.085	0.060	0.400
HIGH	0.455	1.213	0.300	6.720	1.120	0.060	0.525	1.900	8.57	0.640	0.500	0.800	0.285	2.380	0.775

RUNNER, BLUE CARANX CRYSOS 079004 AREA- GULF SITE- E5 LIVER

LENGTH NUM 2 MEAN 0.272 S. D. 0.037 LOW 0.246 HIGH 0.298
WEIGHT NUM 2 MEAN 0.308 S. D. 0.004 LOW 0.305 HIGH 0.310

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0002	0000	0001	0000
MEAN	0.100	0.633	0.915	2.070	2.470	0.050	0.285	1.320	21.30	0.360	0.365	0.000	0.690	0.630	0.320
S. D.	0.085	0.251	0.389	0.099	0.198	0.000	0.262	1.358	0.83	0.000	0.021	0.000	0.071	0.000	0.028
LOW	0.040	0.455	0.640	2.000	2.330	0.000	0.100	0.360	20.71	0.360	0.350	0.000	0.640	0.000	0.300
HIGH	0.160	0.810	1.190	2.140	2.610	0.050	0.470	2.280	21.88	0.360	0.380	0.000	0.740	0.630	0.340

RUNNER, BLUE CARANX CRYSOS 079004 AREA- GULF SITE- E8 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0009	0000	0001	0000
MEAN	0.136	0.492	0.066	3.651	1.303	0.029	0.377	0.924	6.38	0.212	0.000	0.280	0.138	0.648	0.481
S. D.	0.058	0.263	0.016	1.257	0.273	0.009	0.300	0.288	0.94	0.038	0.000	0.000	0.024	0.150	0.075
LOW	0.070	0.220	0.040	1.750	1.030	0.010	0.130	0.395	4.81	0.130	0.000	0.000	0.110	0.440	0.380
HIGH	0.225	1.060	0.090	6.250	1.930	0.040	1.000	1.310	7.69	0.270	0.000	0.280	0.180	0.940	0.630

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

RUNNER, BLUE   CARANX CRYSOS   079004   AREA- GULF   SITE- H2   MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0002	0000	0000	0002	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.265	0.685	0.000	3.425	0.630	0.000	0.270	1.113	3.98	0.140	0.000	0.000	0.125	1.660	0.958
S. D.	0.049	0.276	0.000	0.742	0.064	0.000	0.049	0.131	0.41	0.099	0.000	0.000	0.078	1.018	0.506
LOW	0.230	0.490	0.000	2.900	0.585	0.000	0.235	1.020	3.69	0.070	0.000	0.000	0.070	0.940	0.600
HIGH	0.300	0.880	0.000	3.950	0.675	0.000	0.305	1.205	4.27	0.210	0.000	0.000	0.180	2.380	1.315

RUNNER, BLUE   CARANX CRYSOS   079004   AREA- GULF   SITE- L8   MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0002	0001	0000	0001
MEAN	0.501	0.637	0.055	1.986	0.827	0.039	0.176	0.561	4.74	0.154	0.280	0.182	0.111	0.998	0.500
S. D.	0.203	0.380	0.018	1.478	0.260	0.011	0.148	0.136	2.20	0.047	0.090	0.116	0.034	0.355	0.216
LOW	0.070	0.190	0.020	1.300	0.505	0.030	0.060	0.410	2.20	0.110	0.190	0.060	0.060	0.535	0.100
HIGH	0.700	1.250	0.070	5.325	1.330	0.060	0.480	0.810	9.19	0.220	0.370	0.310	0.160	1.690	0.715

RUNNER, BLUE   CARANX CRYSOS   079004   AREA- GULF   SITE- L8   LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.980	0.310	2.870	1.012	2.650	0.040	0.120	3.310	25.00	0.220	0.000	0.630	0.690	0.310	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.980	0.310	2.870	1.012	2.650	0.040	0.120	3.310	25.00	0.220	0.000	0.630	0.690	0.310	0.630

RUNNER, BLUE   CARANX CRYSOS   079004   AREA- GULF   SITE- R5   MUSCLE

LENGTH NUM 2 MEAN 0.246 S. D. 0.002 LOW 0.244 HIGH 0.247
WEIGHT NUM 2 MEAN 0.326 S. D. 0.021 LOW 0.311 HIGH 0.341

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.085	0.395	0.053	3.885	0.745	0.030	0.235	0.918	4.97	0.185	0.060	0.150	0.148	0.718	0.530
S. D.	0.007	0.233	0.018	3.345	0.007	0.000	0.120	0.173	0.48	0.007	0.000	0.000	0.018	0.315	0.042
LOW	0.080	0.230	0.040	1.520	0.740	0.030	0.150	0.795	4.63	0.180	0.000	0.000	0.135	0.495	0.500
HIGH	0.090	0.560	0.065	6.250	0.750	0.030	0.320	1.040	5.31	0.190	0.060	0.150	0.160	0.940	0.560

RUNNER, BLUE   CARANX CRYSOS   079004   AREA- GULF   SITE- R6   MUSCLE

LENGTH NUM 7 MEAN 0.288 S. D. 0.008 LOW 0.275 HIGH 0.297
WEIGHT NUM 7 MEAN 0.455 S. D. 0.041 LOW 0.385 HIGH 0.510

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0007	0007	0007	0006	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0001	0003	0000	0001	0000
MEAN	0.139	0.329	0.066	2.800	0.857	0.043	0.115	0.716	4.84	0.193	0.127	0.215	0.131	0.769	0.540
S. D.	0.046	0.117	0.009	1.445	0.305	0.011	0.030	0.074	1.03	0.066	0.080	0.271	0.024	0.438	0.150
LOW	0.085	0.155	0.055	1.380	0.550	0.030	0.060	0.630	3.85	0.100	0.060	0.060	0.100	0.130	0.360
HIGH	0.210	0.470	0.080	4.765	1.460	0.060	0.137	0.810	6.47	0.280	0.250	0.620	0.170	1.200	0.750

RUNNER, BLUE   CARANX CRYSOS   079004   AREA- GULF   SITE- R6   LIVER

LENGTH NUM 1 MEAN 0.291 S. D. 0.000 LOW 0.291 HIGH 0.291
WEIGHT NUM 1 MEAN 0.473 S. D. 0.000 LOW 0.473 HIGH 0.473

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.140	0.310	1.870	0.500	0.000	0.040	0.120	3.250	18.50	0.600	0.000	0.000	0.690	0.630	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.140	0.310	1.870	0.500	0.000	0.040	0.120	3.250	18.50	0.600	0.000	0.000	0.690	0.630	0.630

JACK, CREVALLE   CARANX HIPPOS   079005   AREA- GULF   SITE- B7   MUSCLE

LENGTH NUM 1 MEAN 0.800 S. D. 0.000 LOW 0.800 HIGH 0.800
WEIGHT NUM 1 MEAN 9.193 S. D. 0.000 LOW 9.193 HIGH 9.193

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	1.375	0.625	0.070	2.903	0.840	0.030	0.095	0.595	9.09	0.210	0.000	0.000	0.130	0.485	0.405
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	1.375	0.625	0.070	2.903	0.840	0.030	0.095	0.595	9.09	0.210	0.000	0.000	0.130	0.485	0.405

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                                  TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS
                                  IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                  BY TISSUE AND LOCATION


 JACK, CREVALLE                   CARANX HIPPOS                     079005   AREA- GULF                 SITE- B7   LIVER

LENGTH      NUM   1   MEAN        0.800   S. D.      0.000   LOW       0.800   HIGH        0.800
WEIGHT      NUM   1   MEAN        9.193   S. D.      0.000   LOW       9.193   HIGH        9.193
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER       0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
N DET.       0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0001     0000     0000     0000
MEAN        2.050    1.190    0.950    0.750    7.150    0.030    0.060    5.310    35.63    0.620    0.440    0.000    1.840    0.690    0.500
S. D.       0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
LOW         0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
HIGH        2.050    1.190    0.950    0.750    7.150    0.030    0.060    5.310    35.63    0.620    0.440    0.000    1.840    0.690    0.500


 JACK, CREVALLE                   CARANX HIPPOS                     079005   AREA- GULF                 SITE- B8   MUSCLE

LENGTH      NUM   7   MEAN        0.838   S. D.      0.142   LOW       0.737   HIGH        1.143
WEIGHT      NUM   7   MEAN       10.222   S. D.      1.361   LOW       9.072   HIGH       12.247
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER       0007     0007     0007     0007     0007     0007     0007     0006     0006     0007     0007     0007     0007     0007     0007
N DET.       0000     0000     0003     0000     0000     0005     0000     0000     0000     0001     0005     0005     0000     0000     0000
MEAN        1.501    0.606    0.068    2.877    0.898    0.210    0.224    0.823     5.08    0.143    0.265    0.435    0.198    1.168    0.531
S. D.       0.395    0.304    0.035    1.516    0.215    0.240    0.083    0.193     0.84    0.124    0.332    0.092    0.140    0.562    0.225
LOW         0.880    0.156    0.025    0.800    0.650    0.040    0.090    0.500     4.13    0.020    0.030    0.370    0.040    0.150    0.260
HIGH        2.110    1.000    0.110    5.300    1.195    0.380    0.353    1.030     6.31    0.360    0.500    0.500    0.430    1.930    1.000


 JACK, CREVALLE                   CARANX HIPPOS                     079005   AREA- GULF                 SITE- B8   LIVER

LENGTH      NUM   2   MEAN        0.957   S. D.      0.263   LOW       0.771   HIGH        1.143
WEIGHT      NUM   2   MEAN       10.739   S. D.      1.331   LOW       9.798   HIGH       11.680
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER       0002     0002     0002     0001     0001     0002     0002     0002     0002     0002     0002     0002     0002     0002     0002
N DET.       0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0001     0001     0000     0001     0000
MEAN        1.403    1.473    1.353    2.903    9.000    0.025    0.232   12.918    99.21    1.288    0.720    0.940    1.523    1.690    0.495
S. D.       1.375    0.308    0.449    0.000    0.000    0.007    0.030    7.810    72.71    1.234    0.000    0.000    0.562    0.000    0.007
LOW         0.430    1.255    1.035    0.000    0.000    0.020    0.210    7.395    47.79    0.415    0.000    0.000    1.125    0.000    0.490
HIGH        2.375    1.690    1.670    2.903    9.000    0.030    0.253   18.440   150.62    2.160    0.720    0.940    1.920    1.690    0.500


 JACK, CREVALLE                   CARANX HIPPOS                     079005   AREA- GULF                 SITE- E5   MUSCLE

LENGTH      NUM  20   MEAN        0.549   S. D.      0.224   LOW       0.274   HIGH        0.880
WEIGHT      NUM  20   MEAN        2.688   S. D.      2.379   LOW       0.245   HIGH        6.635
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER       0020     0020     0020     0019     0019     0020     0019     0020     0020     0020     0020     0020     0019     0020     0019
N DET.       0000     0001     0003     0001     0000     0005     0001     0000     0000     0003     0018     0017     0000     0003     0000
MEAN        0.603    0.461    0.079    2.798    0.785    0.043    0.247    0.977     5.13    0.258    0.750    0.280    0.164    0.702    0.516
S. D.       0.315    0.202    0.026    1.353    0.305    0.040    0.197    0.402     1.51    0.180    0.707    0.118    0.079    0.222    0.178
LOW         0.190    0.190    0.040    0.650    0.240    0.010    0.040    0.455     2.88    0.090    0.250    0.150    0.105    0.380    0.300
HIGH        1.210    0.840    0.150    6.500    1.570    0.180    0.800    2.310     9.64    0.710    1.250    0.380    0.430    1.190    0.810


 JACK, CREVALLE                   CARANX HIPPOS                     079005   AREA- GULF                 SITE- E5   LIVER

LENGTH      NUM   1   MEAN        0.643   S. D.      0.000   LOW       0.643   HIGH        0.643
WEIGHT      NUM   1   MEAN        3.670   S. D.      0.000   LOW       3.670   HIGH        3.670
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER       0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
N DET.       0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0001     0000     0000     0000
MEAN        0.860    0.500    0.410    4.000    6.050    0.030    0.250    2.530    21.88    0.110    0.250    0.000    0.580    0.440    0.010
S. D.       0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
LOW         0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
HIGH        0.860    0.500    0.410    4.000    6.050    0.030    0.250    2.530    21.88    0.110    0.250    0.000    0.580    0.440    0.010


 JACK, CREVALLE                   CARANX HIPPOS                     079005   AREA- GULF                 SITE- L5   MUSCLE

LENGTH      NUM  11   MEAN        0.368   S. D.      0.073   LOW       0.286   HIGH        0.562
WEIGHT      NUM  11   MEAN        1.066   S. D.      0.415   LOW       0.579   HIGH        2.005
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER       0011     0011     0011     0010     0010     0010     0011     0011     0011     0011     0011     0011     0011     0011     0010
N DET.       0000     0000     0002     0000     0000     0003     0002     0000     0000     0002     0007     0009     0000     0002     0000
MEAN        0.466    0.407    0.080    2.051    0.619    0.035    0.166    0.763     5.68    0.233    0.438    0.395    0.166    0.796    0.569
S. D.       0.200    0.242    0.035    1.790    0.344    0.017    0.068    0.220     1.55    0.081    0.310    0.332    0.052    0.615    0.215
LOW         0.295    0.100    0.040    0.540    0.040    0.020    0.056    0.460     3.44    0.090    0.160    0.160    0.100    0.060    0.300
HIGH        1.025    0.807    0.140    5.800    1.135    0.060    0.300    1.080     9.32    0.335    0.870    0.630    0.265    1.700    0.940


 JACK, CREVALLE                   CARANX HIPPOS                     079005   AREA- GULF                 SITE- L9   MUSCLE

LENGTH      NUM   0   MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
WEIGHT      NUM   0   MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER       0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010
N DET.       0000     0000     0000     0000     0000     0003     0001     0000     0000     0001     0004     0006     0000     0001     0000
MEAN        0.390    0.338    0.054    2.612    0.475    0.031    0.187    0.725     4.58    0.160    0.197    0.445    0.154    0.521    0.425
S. D.       0.031    0.108    0.023    1.224    0.142    0.017    0.094    0.217     1.00    0.086    0.147    0.335    0.036    0.273    0.071
LOW         0.320    0.200    0.035    0.370    0.360    0.010    0.045    0.350     2.72    0.040    0.060    0.050    0.120    0.190    0.300
HIGH        0.440    0.500    0.110    4.750    0.820    0.060    0.320    1.120     5.85    0.305    0.440    0.800    0.220    1.050    0.520
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SCAD, ROUND   DECAPTERUS PUNCTATUS   079013   AREA- SOUTH ATLANTIC   SITE- G1   H&G, TAILLESS

LENGTH   NUM 3   MEAN 0.119   S. D. 0.000   LOW 0.119   HIGH 0.119
WEIGHT   NUM 3   MEAN 0.020   S. D. 0.000   LOW 0.020   HIGH 0.020

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0002	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0001	0000	0000	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000
MEAN	0.010	1.232	0.108	9.705	0.805	0.083	0.465	0.940	15.30	0.530	0.220	0.880	0.752	2.003	1.717
S. D.	0.000	0.724	0.004	1.421	0.177	0.023	0.293	0.151	1.91	0.184	0.000	0.656	0.235	0.666	1.134
LOW	0.010	0.630	0.105	8.700	0.680	0.070	0.165	0.820	14.10	0.320	0.000	0.410	0.500	1.470	0.850
HIGH	0.010	2.035	0.110	10.710	0.930	0.110	0.750	1.110	17.50	0.660	0.220	1.630	0.965	2.750	3.000

YELLOWTAIL   SERIOLA DORSALIS   079023   AREA- CALIFORNIA   SITE- K3   MUSCLE

LENGTH   NUM 24   MEAN 0.776   S. D. 0.085   LOW 0.627   HIGH 0.914
WEIGHT   NUM 24   MEAN 5.395   S. D. 2.673   LOW 2.724   HIGH 10.783

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0024	0021	0023	0024	0024	0023	0023	0024	0023	0023	0024	0024	0023	0024	0022
N DET.	0000	0001	0000	0001	0000	0002	0000	0000	0000	0000	0021	0021	0000	0002	0000
MEAN	0.146	0.542	0.086	2.798	0.525	0.035	0.301	0.540	5.55	0.221	0.433	0.263	0.119	0.738	0.660
S. D.	0.074	0.272	0.039	1.194	0.206	0.033	0.263	0.321	1.43	0.110	0.325	0.183	0.055	0.230	0.358
LOW	0.020	0.150	0.040	0.646	0.170	0.010	0.030	0.040	3.81	0.070	0.080	0.120	0.010	0.250	0.200
HIGH	0.295	1.190	0.180	4.350	1.120	0.160	1.250	1.650	9.28	0.495	0.720	0.470	0.250	1.130	1.750

POMPANO, FLORIDA   TRACHINOTUS CAROLINUS   079028   AREA- SOUTH ATLANTIC   SITE- J4   MUSCLE

LENGTH   NUM 9   MEAN 0.266   S. D. 0.025   LOW 0.228   HIGH 0.300
WEIGHT   NUM 9   MEAN 0.388   S. D. 0.126   LOW 0.250   HIGH 0.538

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0008	0008	0009	0009	0008	0008	0008	0008	0008	0008	0007	0008	0008	0008
N DET.	0001	0000	0002	0000	0000	0001	0000	0000	0000	0000	0005	0003	0000	0001	0000
MEAN	0.064	0.340	0.054	7.326	0.762	0.062	0.165	0.411	8.38	0.278	0.403	0.148	0.142	0.956	0.419
S. D.	0.033	0.116	0.011	4.396	0.600	0.066	0.120	0.134	3.12	0.197	0.274	0.111	0.054	0.333	0.167
LOW	0.020	0.100	0.040	2.760	0.335	0.030	0.060	0.190	4.71	0.110	0.240	0.060	0.055	0.340	0.150
HIGH	0.120	0.480	0.070	14.600	2.250	0.210	0.430	0.570	14.14	0.675	0.720	0.310	0.245	1.250	0.720

POMPANO, FLORIDA   TRACHINOTUS CAROLINUS   079028   AREA- SOUTH ATLANTIC   SITE- J4   LIVER

LENGTH   NUM 1   MEAN 0.259   S. D. 0.000   LOW 0.259   HIGH 0.259
WEIGHT   NUM 1   MEAN 0.275   S. D. 0.000   LOW 0.275   HIGH 0.275

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	0.000	0.200	0.680	8.850	1.640	0.120	0.190	10.560	32.50	0.450	0.310	0.000	0.610	0.000	0.560
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.200	0.680	8.850	1.640	0.120	0.190	10.560	32.50	0.450	0.310	0.000	0.610	0.000	0.560

POMPANO, FLORIDA   TRACHINOTUS CAROLINUS   079028   AREA- GULF   SITE- E5   MUSCLE

LENGTH   NUM 20   MEAN 0.367   S. D. 0.028   LOW 0.317   HIGH 0.422
WEIGHT   NUM 20   MEAN 0.634   S. D. 0.194   LOW 0.418   HIGH 1.168

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0019	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0018
N DET.	0002	0001	0003	0000	0000	0005	0001	0000	0000	0000	0015	0016	0000	0002	0000
MEAN	0.068	0.408	0.071	8.029	0.657	0.028	0.146	0.371	7.00	0.192	0.204	0.293	0.104	0.766	0.480
S. D.	0.033	0.179	0.023	4.535	0.187	0.009	0.124	0.142	1.08	0.080	0.120	0.015	0.030	0.264	0.162
LOW	0.020	0.220	0.040	1.900	0.410	0.010	0.050	0.040	5.53	0.075	0.060	0.280	0.070	0.380	0.030
HIGH	0.125	0.750	0.130	19.210	1.110	0.050	0.535	0.590	8.75	0.360	0.370	0.310	0.190	1.250	0.750

POMPANO, FLORIDA   TRACHINOTUS CAROLINUS   079028   AREA- GULF   SITE- E5   LIVER

LENGTH   NUM 2   MEAN 0.361   S. D. 0.008   LOW 0.355   HIGH 0.366
WEIGHT   NUM 2   MEAN 0.585   S. D. 0.030   LOW 0.563   HIGH 0.606

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.095	0.625	2.750	4.785	0.900	0.110	0.080	14.065	49.66	0.900	0.780	0.380	0.905	0.690	0.845
S. D.	0.007	0.530	1.598	3.203	0.806	0.042	0.000	2.213	29.65	0.679	0.750	0.000	0.035	0.354	0.219
LOW	0.090	0.250	1.620	2.520	0.330	0.080	0.000	12.500	28.69	0.420	0.250	0.000	0.880	0.440	0.690
HIGH	0.100	1.000	3.880	7.050	1.470	0.140	0.080	15.630	70.62	1.380	1.310	0.380	0.930	0.940	1.000

POMPANO, FLORIDA   TRACHINOTUS CAROLINUS   079028   AREA- GULF   SITE- L9   MUSCLE

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0009
N DET.	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000	0009	0008	0000	0000	0000
MEAN	0.230	0.551	0.098	9.805	0.447	0.020	0.387	0.269	8.62	0.152	0.130	0.220	0.090	0.701	0.547
S. D.	0.108	0.232	0.076	5.831	0.188	0.012	0.284	0.118	0.77	0.046	0.000	0.042	0.029	0.182	0.151
LOW	0.120	0.060	0.060	3.350	0.220	0.010	0.095	0.080	7.03	0.080	0.000	0.190	0.055	0.480	0.310
HIGH	0.420	0.810	0.310	21.475	0.850	0.040	0.750	0.490	9.31	0.250	0.130	0.250	0.150	0.940	0.880

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES: BY TISSUE AND LOCATION

POMPANO, FLORIDA TRACHINOTUS CAROLINUS 079028 AREA- GULF SITE- R6 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	11	0.300	0.000	0.300	0.300
WEIGHT	11	0.596	0.000	0.596	0.596

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0022	0021	0022	0022	0022	0022	0021	0021	0022	0021	0022	0022	0022	0022	0021
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0018	0014	0001	0001	0000
MEAN	0.117	0.337	0.071	4.609	0.661	0.031	0.121	0.338	6.41	0.176	0.181	0.320	0.077	0.528	0.589
S. D.	0.074	0.169	0.021	2.532	0.348	0.016	0.056	0.165	1.51	0.083	0.126	0.186	0.023	0.266	0.231
LOW	0.030	0.030	0.025	0.640	0.400	0.010	0.030	0.140	2.25	0.065	0.105	0.070	0.030	0.060	0.300
HIGH	0.305	0.690	0.110	11.800	1.780	0.070	0.220	0.765	9.56	0.380	0.370	0.630	0.130	1.000	1.220

POMPANO, FLORIDA TRACHINOTUS CAROLINUS 079028 AREA- GULF SITE- R6 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.160	0.500	5.750	2.020	0.770	0.070	0.080	29.370	44.37	0.460	0.500	0.440	0.650	0.630	0.750
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.160	0.500	5.750	2.020	0.770	0.070	0.080	29.370	44.37	0.460	0.500	0.440	0.650	0.630	0.750

PERMIT TRACHINOTUS FALCATUS 079029 AREA- SOUTH ATLANTIC SITE- J4 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	7	0.200	0.006	0.194	0.212
WEIGHT	7	0.203	0.014	0.180	0.219

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0000	0000	0003	0000	0000	0002	0000	0000	0000	0003	0007	0007	0001	0002	0000
MEAN	0.107	0.737	0.088	8.936	0.612	0.040	0.172	0.369	4.90	0.288	0.505	0.350	0.116	1.212	0.489
S. D.	0.043	0.443	0.046	2.159	0.217	0.017	0.076	0.078	0.57	0.151	0.516	0.212	0.037	0.540	0.184
LOW	0.060	0.220	0.040	5.500	0.250	0.010	0.056	0.290	4.19	0.140	0.140	0.200	0.070	0.775	0.120
HIGH	0.190	1.650	0.140	11.470	1.010	0.070	0.280	0.540	5.91	0.520	0.870	0.500	0.175	2.330	0.685

PALOMETA TRACHINOTUS GOODEI 079030 AREA- SOUTH ATLANTIC SITE- J4 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	2	0.232	0.002	0.230	0.233
WEIGHT	2	0.334	0.020	0.320	0.348

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0001	0000	0000	0002	0000	0000	0000	0002	0002	0002	0000	0002	0000
MEAN	0.330	0.363	0.040	7.645	0.640	0.000	0.163	0.263	4.51	0.000	0.000	0.000	0.115	0.000	0.363
S. D.	0.368	0.018	0.000	1.690	0.226	0.000	0.004	0.173	0.82	0.000	0.000	0.000	0.064	0.000	0.018
LOW	0.070	0.350	0.000	6.450	0.480	0.000	0.160	0.140	3.93	0.000	0.000	0.000	0.070	0.000	0.350
HIGH	0.590	0.375	0.040	8.840	0.800	0.000	0.165	0.385	5.09	0.000	0.000	0.000	0.160	0.000	0.375

MACKEREL, JACK TRACHURUS SYMMETRICUS 079034 AREA- CALIFORNIA SITE- H3 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	10	0.567	0.014	0.550	0.590
WEIGHT	10	2.200	0.140	1.920	2.380

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0003	0001	0000	0000	0000	0008	0006	0000	0000	0000
MEAN	0.332	0.451	0.075	1.942	0.817	0.040	0.122	0.467	4.44	0.175	0.060	0.238	0.135	0.542	0.480
S. D.	0.093	0.165	0.018	0.933	0.249	0.038	0.057	0.182	1.88	0.046	0.000	0.107	0.032	0.112	0.164
LOW	0.230	0.280	0.060	0.350	0.480	0.010	0.060	0.100	2.25	0.090	0.060	0.130	0.090	0.425	0.220
HIGH	0.510	0.810	0.110	3.725	1.285	0.115	0.220	0.680	8.63	0.220	0.060	0.380	0.185	0.750	0.690

MACKEREL, JACK TRACHURUS SYMMETRICUS 079034 AREA- CALIFORNIA SITE- H3 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.567	0.000	0.567	0.567
WEIGHT	1	2.200	0.000	2.200	2.200

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.860	0.565	13.440	2.870	8.185	0.030	0.155	2.410	36.72	0.225	0.345	3.440	1.145	0.720	0.250
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.860	0.565	13.440	2.870	8.185	0.030	0.155	2.410	36.72	0.225	0.345	3.440	1.145	0.720	0.250

MACKEREL, JACK TRACHURUS SYMMETRICUS 079034 AREA- CALIFORNIA SITE- I8 HEADED

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	4	0.250	0.000	0.250	0.250
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0003
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.070	0.978	0.105	2.628	0.576	0.118	0.193	0.649	7.70	0.288	0.187	0.135	0.194	1.091	1.340
S. D.	0.000	0.659	0.064	1.928	0.206	0.028	0.114	0.256	3.57	0.152	0.085	0.052	0.093	0.484	0.136
LOW	0.000	0.190	0.010	1.025	0.335	0.090	0.040	0.310	2.38	0.070	0.090	0.090	0.060	0.380	1.190
HIGH	0.070	1.690	0.150	5.000	0.830	0.150	0.315	0.880	9.90	0.400	0.250	0.185	0.265	1.405	1.455

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

CK, AKULE   TRACHUROPS CRUMENOPTHALMUS   079053   AREA- HAWAII   SITE- D1   MUSCLE

GTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
GHT   NUM 39   MEAN 0.266   S. D. 0.043   LOW 0.187   HIGH 0.369

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
BER	0039	0038	0039	0038	0037	0038	0039	0038	0039	0038	0039	0039	0039	0039	0038
ET.	0002	0001	0003	0000	0000	0010	0002	0000	0000	0002	0030	0028	0000	0005	0000
N	0.149	0.484	0.077	3.760	0.883	0.037	0.186	1.280	12.07	0.239	0.158	0.305	0.181	0.632	0.497
D.	0.062	0.299	0.050	2.088	0.226	0.027	0.135	1.336	5.15	0.131	0.100	0.220	0.091	0.208	0.189
OW	0.020	0.180	0.010	1.100	0.570	0.010	0.050	0.210	6.59	0.040	0.060	0.100	0.070	0.250	0.190
IGH	0.270	1.505	0.290	12.100	1.660	0.140	0.690	8.995	31.79	0.470	0.280	0.870	0.670	1.065	1.250

CK, (MACKEREL SCAD)   DECAPTERUS PINNULATUS   079068   AREA- HAWAII   SITE- D6   MUSCLE

NGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
EIGHT   NUM 21   MEAN 0.398   S. D. 0.033   LOW 0.347   HIGH 0.463

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
BER	0019	0021	0020	0021	0021	0021	0020	0020	0021	0021	0021	0021	0021	0021	0019
DET.	0004	0001	0000	0000	0000	0000	0000	0000	0000	0000	0020	0020	0000	0005	0000
EAN	0.072	0.577	0.092	3.457	0.976	0.035	0.215	1.093	8.79	0.209	0.220	0.170	0.187	0.599	0.558
. D.	0.045	0.344	0.022	1.563	0.387	0.009	0.150	0.488	2.26	0.064	0.000	0.000	0.058	0.246	0.154
OW	0.020	0.130	0.060	0.970	0.190	0.020	0.040	0.260	3.50	0.120	0.000	0.000	0.115	0.130	0.380
H	0.160	1.440	0.130	6.650	1.620	0.060	0.640	1.880	12.38	0.370	0.220	0.170	0.310	1.000	1.000

ACK, (MACKEREL SCAD)   DECAPTERUS PINNULATUS   079068   AREA- HAWAII   SITE- H4   MUSCLE

ENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
EIGHT   NUM 10   MEAN 0.178   S. D. 0.029   LOW 0.133   HIGH 0.212

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
MBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
DET.	0009	0000	0001	0000	0000	0004	0000	0000	0000	0001	0007	0006	0000	0002	0000
EAN	0.050	0.777	0.082	4.660	1.188	0.038	0.314	1.477	10.51	0.216	0.197	0.415	0.181	0.873	0.671
D.	0.000	0.546	0.040	2.530	0.405	0.026	0.192	0.378	2.79	0.176	0.080	0.190	0.062	0.279	0.255
W	0.000	0.365	0.040	1.790	0.650	0.010	0.080	1.006	7.63	0.040	0.120	0.160	0.040	0.400	0.325
GH	0.050	2.130	0.180	10.280	1.840	0.070	0.680	2.240	16.36	0.610	0.280	0.620	0.260	1.250	1.120

JACK, (MACKEREL SCAD)   DECAPTERUS PINNULATUS   079068   AREA- HAWAII   SITE- H5   MUSCLE

NGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
IGHT   NUM 9   MEAN 0.314   S. D. 0.035   LOW 0.272   HIGH 0.369

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0008	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0006	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0009	0000	0003	0000
AN	0.027	0.478	0.078	5.026	1.193	0.028	0.161	1.028	7.60	0.170	0.000	0.000	0.162	0.637	0.506
D.	0.012	0.288	0.019	3.161	0.242	0.012	0.086	0.545	1.68	0.085	0.000	0.000	0.059	0.152	0.135
W	0.020	0.250	0.060	1.425	0.730	0.010	0.060	0.220	5.80	0.060	0.000	0.000	0.100	0.500	0.380
GH	0.040	1.000	0.120	10.100	1.450	0.040	0.310	2.000	11.00	0.340	0.000	0.000	0.300	0.880	0.810

JACK, CREVALLE (HAWAII)   CARANX MELAMPYGUS   079069   AREA- HAWAII   SITE- D6   MUSCLE

NGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
IGHT   NUM 1   MEAN 3.005   S. D. 0.000   LOW 3.005   HIGH 3.005

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
EAN	0.515	0.250	0.060	2.890	0.445	0.035	0.060	0.335	3.91	0.220	0.870	0.230	0.080	0.720	0.610
. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.515	0.250	0.060	2.890	0.445	0.035	0.060	0.335	3.91	0.220	0.870	0.230	0.080	0.720	0.610

JACK, CREVALLE (HAWAII)   CARANX MELAMPYGUS   079069,   AREA- HAWAII   SITE- D9   MUSCLE

ENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 39   MEAN 2.364   S. D. 0.637   LOW 1.701   HIGH 4.111

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0038	0037	0039	0039	0039	0039	0039	0039	0039	0039	0039	0039	0039	0038	0035
DET.	0000	0000	0000	0000	0001	0002	0001	0000	0000	0000	0034	0029	0000	0008	0000
EAN	0.332	0.354	0.067	2.513	0.381	0.035	0.195	0.383	4.00	0.229	0.128	0.232	0.102	0.746	0.637
S. D.	0.141	0.157	0.027	1.423	0.191	0.014	0.115	0.222	1.29	0.104	0.078	0.120	0.033	0.208	0.216
LOW	0.070	0.130	0.020	0.510	0.050	0.010	0.020	0.120	1.38	0.060	0.060	0.060	0.040	0.380	0.285
HIGH	0.580	0.880	0.150	6.500	0.820	0.100	0.465	1.060	7.38	0.540	0.250	0.440	0.180	1.190	1.220

WAHOO   ACANTHOCYBIUM SOLANDERI   091001   AREA- GULF   SITE- L5   MUSCLE

LENGTH   NUM 1   MEAN 1.175   S. D. 0.000   LOW 1.175   HIGH 1.175
WEIGHT   NUM 3   MEAN 14.906   S. D. 6.875   LOW 7.037   HIGH 19.749

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0003	0000
MEAN	0.730	0.345	0.052	1.392	0.835	0.025	0.218	0.333	4.91	0.217	0.000	0.000	0.072	0.000	0.608
S. D.	0.468	0.035	0.003	0.970	0.308	0.009	0.148	0.021	0.58	0.023	0.000	0.000	0.010	0.000	0.202
OW	0.190	0.310	0.050	0.700	0.500	0.015	0.090	0.310	4.25	0.190	0.000	0.000	0.060	0.000	0.470
IGH	1.000	0.380	0.055	2.500	1.105	0.030	0.380	0.350	5.34	0.230	0.000	0.000	0.080	0.000	0.840

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                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   M
                                        IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                       BY TISSUE AND LOCATION

 WAHOO                                ACANTHOCYBIUM SOLANDERI              091001   AREA- HAWAII                 SITE- A8   MUSCLE

LENGTH     NUM     0   MEAN         0.000    S. D.        0.000    LOW       0.000    HIGH        0.000
WEIGHT     NUM     3   MEAN        15.739    S. D.        1.311    LOW      14.982    HIGH       17.252
          MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0003     0003    0003    0003    0003     0003    0003    0003    0003     0003     0003    0003    0003    0003     0003
N DET.     0000     0001    0001    0000    0000     0002    0001    0000    0000     0001     0002    0003    0001    0002     000
MEAN       0.357    0.700   0.125   2.663   1.232    0.030   0.210   0.180   6.94     0.480    0.080   0.000   0.140   0.710    0.29
S. D.      0.293    0.212   0.078   1.228   0.682    0.000   0.127   0.167   1.29     0.028    0.000   0.000   0.099   0.000    0.128
LOW        0.140    0.550   0.070   1.490   0.740    0.000   0.120   0.030   5.64     0.460    0.000   0.000   0.070   0.000    0.150
HIGH       0.690    0.850   0.180   3.940   2.010    0.030   0.300   0.360   8.21     0.500    0.080   0.000   0.210   0.710    0.400

 WAHOO                                ACANTHOCYBIUM SOLANDERI              091001   AREA- HAWAII                 SITE- D5   MUSCLE

LENGTH     NUM     0   MEAN         0.000    S. D.        0.000    LOW       0.000    HIGH        0.000
WEIGHT     NUM     9   MEAN        20.077    S. D.        5.945    LOW       9.988    HIGH       27.694
          MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0009     0009    0009    0009    0009     0009    0009    0009    0009     0009     0009    0009    0009    0009     0009
N DET.     0000     0000    0000    0000    0000     0001    0001    0001    0000     0000     0007    0009    0000    0003     0000
MEAN       0.564    0.512   0.098   4.305   1.069    0.038   0.503   0.511   5.82     0.261    0.220   0.000   0.134   0.717    0.496
S. D.      0.421    0.270   0.051   2.068   0.298    0.015   0.493   0.516   1.00     0.116    0.042   0.000   0.084   0.373    0.095
LOW        0.180    0.110   0.040   1.766   0.730    0.020   0.060   0.080   3.89     0.125    0.190   0.000   0.055   0.380    0.350
HIGH       1.430    0.940   0.180   7.360   1.690    0.070   1.560   1.610   7.06     0.490    0.250   0.000   0.290   1.400    0.630

 WAHOO                                ACANTHOCYBIUM SOLANDERI              091001   AREA- HAWAII                 SITE- D5   LIVER

LENGTH     NUM     0   MEAN         0.000    S. D.        0.000    LOW       0.000    HIGH        0.000
WEIGHT     NUM     3   MEAN        20.279    S. D.        6.426    LOW      16.344    HIGH       27.694
          MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0003     0003    0003    0002    0002     0003    0003    0003    0003     0003     0003    0003    0003    0003     0003
N DET.     0001     0000    0000    0000    0000     0000    0001    0000    0000     0000     0000    0002    0000    0001     0000
MEAN       0.190    0.213 . 2.133   3.800   3.740    0.047   0.260  25.357  238.33    0.287    0.407   1.090   0.657   0.910    0.607
S. D.      0.028    0.144   1.600   2.404   1.640    0.023   0.071  19.543  350.71    0.116    0.301   0.000   0.428   0.750    0.342
LOW        0.170    0.130   0.740   2.100   2.580    0.020   0.210   8.440   25.63    0.210    0.120   0.000   0.380   0.380    0.380
HIGH       0.210    0.380   3.880   5.500   4.900    0.060   0.310  46.750  643.12    0.420    0.720   1.090   1.150   1.440    1.000

 WAHOO                                ACANTHOCYBIUM SOLANDERI              091001   AREA- HAWAII                 SITE- D8   MUSCLE

LENGTH     NUM     0   MEAN         0.000    S. D.        0.000    LOW       0.000    HIGH        0.000
WEIGHT     NUM     1   MEAN         9.988    S. D.        0.000    LOW       9.988    HIGH        9.988
          MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0001     0001    0001    0001    0001     0001    0001    0001    0001     0001     0001    0001    0001    0001     0001
N DET.     0000     0000    0000    0000    0000     0000    0000    0000    0000     0000     0001    0001    0000    0000     0000
MEAN       0.240    0.463   0.110   4.125   0.915    0.040   0.300   0.195   4.14     0.110    0.000   0.000   0.125   0.940    0.515
S. D.      0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00     0.000    0.000   0.000   0.000   0.000    0.000
LOW        0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00     0.000    0.000   0.000   0.000   0.000    0.000
HIGH       0.240    0.463   0.110   4.125   0.915    0.040   0.300   0.195   4.14     0.110    0.000   0.000   0.125   0.940    0.515

 WAHOO                                ACANTHOCYBIUM SOLANDERI              091001   AREA- HAWAII                 SITE- H6   MUSCLE

LENGTH     NUM     0   MEAN         0.000    S. D.        0.000    LOW       0.000    HIGH        0.000
WEIGHT     NUM     1   MEAN        13.620    S. D.        0.000    LOW      13.620    HIGH       13.620
          MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0001     0001    0001    0001    0001     0001    0001    0001    0001     0001     0001    0001    0001    0001     0001
N DET.     0000     0000    0000    0000    0000     0001    0000    0000    0000     0000     0001    0001    0000    0000     0000
MEAN       0.110    0.420   0.500   5.150   1.400    0.000   0.390   0.245   4.64     0.250    0.000   0.000   0.090   1.275    0.400
S. D.      0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00     0.000    0.000   0.000   0.000   0.000    0.000
LOW        0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00     0.000    0.000   0.000   0.000   0.000    0.000
HIGH       0.110    0.420   0.500   5.150   1.400    0.000   0.390   0.245   4.64     0.250    0.000   0.000   0.090   1.275    0.400

 WAHOO                                ACANTHOCYBIUM SOLANDERI              091001   AREA- HAWAII                 SITE- J5   MUSCLE

LENGTH     NUM     0   MEAN         0.000    S. D.        0.000    LOW       0.000    HIGH        0.000
WEIGHT     NUM     1   MEAN        20.430    S. D.        0.000    LOW      20.430    HIGH       20.430
          MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0001     0001    0001    0001    0001     0001    0001    0001    0001     0001     0001    0001    0001    0001     0001
N DET.     0000     0000    0000    0000    0000     0000    0000    0000    0000     0000     0000    0000    0000    0000     0000
MEAN       0.440    0.250   0.040   2.900   1.515    0.020   0.220   0.255   5.32     0.210    0.700   0.800   0.060   1.300    0.745
S. D.      0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00     0.000    0.000   0.000   0.000   0.000    0.000
LOW        0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00     0.000    0.000   0.000   0.000   0.000    0.000
HIGH       0.440    0.250   0.040   2.900   1.515    0.020   0.220   0.255   5.32     0.210    0.700   0.800   0.060   1.300    0.745

 TUNNY, LITTLE                        EUTHYNNUS ALLETTERATUS               091006   AREA- GULF                   SITE- E5   MUSCLE

LENGTH     NUM    50   MEAN         0.647    S. D.        0.043    LOW       0.560    HIGH        0.750
WEIGHT     NUM    50   MEAN         3.342    S. D.        0.363    LOW       2.050    HIGH        3.953
          MERCURY   LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER     0050     0050    0050    0047    0048     0050    0046    0050    0050     0049     0050    0050    0050    0050     0046
N DET.     0000     0000    0000    0001    0000     0007    0003    0000    0000     0000     0045    0046    0000    0009     0000
MEAN       0.806    0.434   0.073   2.451   1.673    0.028   0.223   0.738   6.74     0.193    0.294   0.275   0.161   0.610    0.497
S. D.      0.338    0.219   0.027   1.546   0.891    0.014   0.160   0.386   2.12     0.099    0.355   0.133   0.053   0.222    0.156
LOW        0.310    0.130   0.010   0.460   0.175    0.010   0.020   0.060   2.37     0.060    0.060   0.190   0.040   0.190    0.095
HIGH       1.750    1.250   0.150   7.250   5.250    0.090   0.630   1.405  12.50     0.630    0.870   0.470   0.310   1.250    0.960
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

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NY, LITTLE             EUTHYNNUS ALLETTERATUS          091006   AREA- GULF               SITE- E5   LIVER

TH      NUM   2   MEAN      0.621   S. D.     0.056   LOW     0.581   HIGH      0.660
HT      NUM   2   MEAN      3.305   S. D.     0.087   LOW     3.243   HIGH      3.366
       MERCURY  LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM  COPPER  ZINC   NICKEL  MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM    PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM     PPM    PPM     PPM     PPM     PPM

ER       0002   0002   0002    0002    0002    0002    0002    0002   0002    0002    0002   0002    0002    0002    0002
T.       0000   0000   0000    0000    0000    0000    0000    0000   0000    0000    0000   0000    0000    0001    0000
        0.980  0.703  3.165   4.613   3.240   0.295   0.390   5.255 118.00   0.425   0.320  0.185   1.160   0.560   0.605
D.      0.566  0.067  1.789   0.548   0.622   0.290   0.368   0.643  60.81   0.092   0.141  0.092   0.226   0.000   0.290
OW      0.580  0.655  1.900   4.225   2.800   0.090   0.130   4.800  75.00   0.360   0.220  0.120   1.000   0.000   0.400
IGH     1.380  0.750  4.430   5.000   3.680   0.500   0.650   5.710 161.00   0.490   0.420  0.250   1.320   0.560   0.810

A, SKIPJACK            EUTHYNNUS PELAMIS               091008   AREA- PACIFIC            SITE-      MUSCLE

ENGTH   NUM  20   MEAN      0.598   S. D.     0.036   LOW     0.517   HIGH      0.651
EIGHT   NUM   0   MEAN      0.000   S. D.     0.000   LOW     0.000   HIGH      0.000
       MERCURY  LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM  COPPER  ZINC   NICKEL  MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM    PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM     PPM    PPM     PPM     PPM     PPM

BER      0020   0020   0020    0020    0019    0019    0019    0020   0020    0020    0020   0020    0020    0020    0019
ET.      0003   0000   0000    0000    0000    0001    0002    0000   0000    0000    0014   0016    0000    0001    0000
EAN     0.088  0.708  0.143   2.161   1.242   0.068   0.206   0.996  13.17   0.286   0.173  0.395   0.166   1.034   0.624
. D.    0.043  0.339  0.057   1.250   0.643   0.037   0.146   0.413   6.36   0.127   0.073  0.167   0.053   0.309   0.198
OW      0.040  0.190  0.040   0.437   0.730   0.030   0.060   0.370   6.40   0.110   0.060  0.250   0.060   0.560   0.380
H       0.170  1.620  0.250   5.000   3.650   0.180   0.560   1.880  27.50   0.690   0.250  0.630   0.280   1.500   1.370

NA, SKIPJACK           EUTHYNNUS PELAMIS               091008   AREA- PACIFIC            SITE-      LIVER

ENGTH   NUM   2   MEAN      0.621   S. D.     0.042   LOW     0.591   HIGH      0.651
EIGHT   NUM   0   MEAN      0.000   S. D.     0.000   LOW     0.000   HIGH      0.000
       MERCURY  LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM  COPPER  ZINC   NICKEL  MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM    PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM     PPM    PPM     PPM     PPM     PPM

MBER     0002   0002   0002    0002    0001    0002    0002    0002   0002    0002    0002   0002    0002    0002    0002
 DET.    0001   0000   0000    0000    0000    0000    0001    0000   0000    0000    0000   0001    0000    0000    0000
EAN     0.090  0.785  8.375   1.175   9.250   0.060   0.440   5.815  47.19   0.260   0.390  0.380   1.030   1.190   0.345
D.      0.000  0.573  7.601   0.389   0.000   0.000   0.000   4.688   3.98   0.014   0.113  0.000   0.933   0.354   0.219
        0.000  0.380  3.000   0.900   0.000   0.060   0.000   2.500  44.37   0.250   0.310  0.000   0.370   0.940   0.190
H       0.090  1.190 13.750   1.450   9.250   0.060   0.440   9.130  50.00   0.270   0.470  0.380   1.690   1.440   0.500

TUNA, SKIPJACK         EUTHYNNUS PELAMIS               091008   AREA- HAWAII             SITE- D5   MUSCLE

GTH     NUM  10   MEAN      0.617   S. D.     0.021   LOW     0.595   HIGH      0.658
GHT     NUM  17   MEAN      4.565   S. D.     1.415   LOW     2.494   HIGH      6.713
       MERCURY  LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM  COPPER  ZINC   NICKEL  MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM    PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM     PPM    PPM     PPM     PPM     PPM

UMBER    0018   0018   0018    0018    0017    0018    0018    0018   0018    0017    0018   0018    0018    0018    0018
 DET.    0000   0002   0005    0000    0000    0005    0004    0000   0000    0003    0016   0015    0001    0004    0000
IN      0.200  0.523  0.073   3.498   1.310   0.043   0.177   0.875   4.77   0.205   0.420  0.443   0.117   0.628   0.459
D.      0.081  0.438  0.038   1.362   0.494   0.043   0.103   0.402   1.26   0.179   0.156  0.185   0.055   0.346   0.150
        0.050  0.060  0.010   0.900   0.600   0.010   0.055   0.215   2.88   0.065   0.310  0.260   0.045   0.120   0.160
GH      0.385  1.700  0.175   6.060   2.060   0.160   0.370   1.753   7.14   0.790   0.530  0.630   0.290   1.440   0.750

UNA, SKIPJACK          EUTHYNNUS PELAMIS               091008   AREA- HAWAII             SITE- D5   LIVER

NGTH    NUM   1   MEAN      0.623   S. D.     0.000   LOW     0.623   HIGH      0.623
IGHT    NUM   3   MEAN      4.086   S. D.     1.347   LOW     3.119   HIGH      5.625
       MERCURY  LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM  COPPER  ZINC   NICKEL  MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM    PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM     PPM    PPM     PPM     PPM     PPM

MBER     0003   0003   0003    0002    0000    0003    0003    0003   0003    0003    0003   0003    0003    0003    0003
DET.     0000   0000   0000    0000    0000    0000    0000    0000   0000    0000    0001   0002    0000    0000    0000
AN      0.157  0.633  9.867  11.675   0.000   0.053   0.260   8.620  43.75   0.227   0.420  0.480   0.937   0.710   0.663
 D.     0.015  0.230  6.217  13.188   0.000   0.051   0.157   5.997  26.55   0.091   0.113  0.000   0.100   0.035   0.232
OW      0.140  0.380  2.850   2.350   0.000   0.010   0.150   1.810  25.06   0.160   0.340  0.000   0.840   0.690   0.450
IGH     0.170  0.830 14.690  21.000   0.000   0.110   0.440  13.110  74.14   0.330   0.500  0.480   1.040   0.750   0.910

UNA, SKIPJACK          EUTHYNNUS PELAMIS               091008   AREA- HAWAII             SITE- D6   MUSCLE

NGTH    NUM   0   MEAN      0.000   S. D.     0.000   LOW     0.000   HIGH      0.000
EIGHT   NUM   6   MEAN      3.048   S. D.     0.379   LOW     2.296   HIGH      3.374
       MERCURY  LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM  COPPER  ZINC   NICKEL  MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM    PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM     PPM    PPM     PPM     PPM     PPM

MBER     0007   0007   0007    0007    0007    0007    0007    0007   0007    0007    0007   0007    0007    0007    0007
DET.     0000   0000   0000    0000    0000    0002    0001    0000   0000    0000    0006   0005    0000    0000    0000
AN      0.229  0.602  0.091   4.215   1.110   0.019   0.178   0.495   3.90   0.143   0.380  0.500   0.084   0.544   0.401
. D.    0.065  0.245  0.073   1.580   0.218   0.007   0.097   0.241   1.20   0.047   0.000  0.438   0.024   0.160   0.084
OW      0.110  0.250  0.040   2.775   0.870   0.010   0.060   0.270   2.13   0.090   0.000  0.190   0.050   0.410   0.260
GH      0.300  0.895  0.255   6.525   1.500   0.030   0.310   0.965   5.65   0.200   0.380  0.810   0.120   0.810     535

UNA, SKIPJACK          EUTHYNNUS PELAMIS               091008   AREA- HAWAII             SITE- D6   LIVER

ENGTH   NUM   0   MEAN      0.000   S. D.     0.000   LOW     0.000   HIGH      0.000
EIGHT   NUM   2   MEAN      3.275   S. D.     0.141   LOW     3.175   HIGH      3.374
       MERCURY  LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM  COPPER  ZINC   NICKEL  MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM    PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM     PPM    PPM     PPM     PPM     PPM

MBER     0002   0002   0002    0000    0000    0002    0002    0002   0002    0002    0002   0002    0002    0002    0002
DET.     0000   0000   0000    0000    0000    0001    0000    0000   0000    0000    0001   0002    0000    0000    0000
EAN     0.120  0.720  2.475   0.000   0.000   0.140   0.170   5.570  48.89   0.175   0.130  0.000   0.690   0.700   0.480
. D.    0.028  0.042  0.474   0.000   0.000   0.000   0.057   3.903  36.43   0.120   0.000  0.000   0.495   0.156   0.594
W       0.100  0.690  2.140   0.000   0.000   0.000   0.130   2.810  23.13   0.090   0.000  0.000   0.340   0.590   0.060
GH      0.140  0.750  2.810   0.000   0.000   0.140   0.210   8.330  74.65   0.260   0.130  0.000   1.040   0.810   0.900
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES: BY TISSUE AND LOCATION

LOCATION LEVEL 5

TUNA, SKIPJACK EUTHYNNUS PELAMIS 091008 AREA- HAWAII SITE- D9 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 15 MEAN 2.253 S. D. 0.323 LOW 1.843 HIGH 2.750

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0015	0015	0015	0015	0015	0015	0015	0014	0015	0015	0015	0015	0015	0015	00
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0012	0011	0000	0001	00
MEAN	0.113	0.492	0.069	5.029	1.227	0.028	0.184	0.526	5.83	0.181	0.170	0.335	0.109	0.671	0.5
S. D.	0.087	0.229	0.019	1.780	0.326	0.026	0.099	0.316	1.83	0.072	0.035	0.071	0.043	0.210	0.172
LOW	0.020	0.250	0.040	2.825	0.750	0.010	0.060	0.130	2.31	0.100	0.130	0.280	0.045	0.190	0.250
HIGH	0.295	1.000	0.110	10.082	1.710	0.090	0.380	1.355	8.37	0.370	0.190	0.440	0.190	0.940	0.815

TUNA, SKIPJACK EUTHYNNUS PELAMIS 091008 AREA- CALIFORNIA SITE- R2 MUSCLE

LENGTH NUM 10 MEAN 0.583 S. D. 0.022 LOW 0.555 HIGH 0.634
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	001
N DET.	0000	0000	0002	0000	0000	0005	0000	0000	0000	0001	0008	0008	0000	0004	00
MEAN	0.120	0.461	0.088	5.169	1.483	0.038	0.232	1.172	10.97	0.337	0.465	0.255	0.204	0.891	0.429
S. D.	0.020	0.152	0.045	4.225	0.535	0.022	0.164	0.432	3.78	0.239	0.573	0.134	0.091	0.496	0.130
LOW	0.090	0.200	0.030	0.200	0.970	0.010	0.070	0.400	4.31	0.140	0.060	0.160	0.070	0.560	0.120
HIGH	0.150	0.720	0.145	11.200	2.685	0.070	0.600	1.830	14.64	0.930	0.870	0.350	0.360	1.790	0.55

TUNA, SKIPJACK EUTHYNNUS PELAMIS 091008 AREA- CALIFORNIA SITE- R2 LIVER

LENGTH NUM 1 MEAN 0.582 S. D. 0.000 LOW 0.582 HIGH 0.582
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.440	2.010	0.600	0.000	0.000	0.220	0.810	13.75	0.130	0.200	0.000	0.670	0.060	0.060
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.000	0.440	2.010	0.600	0.000	0.000	0.220	0.810	13.75	0.130	0.200	0.000	0.670	0.060	0.06

BONITO, PAC. SARDA CHILIENSIS 091009 AREA- CALIFORNIA SITE- I8 MUSCLE

LENGTH NUM 20 MEAN 0.388 S. D. 0.053 LOW 0.340 HIGH 0.544
WEIGHT NUM 10 MEAN 0.454 S. D. 0.000 LOW 0.454 HIGH 0.454

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0019	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0004	0000	0002	0002	0000	0004	0000	0001	0000	0000	0013	0011	0000	0003	0000
MEAN	0.118	0.451	0.071	2.124	0.477	0.044	0.259	0.829	6.72	0.225	0.241	0.421	0.183	0.893	0.716
S. D.	0.071	0.178	0.031	1.151	0.171	0.028	0.217	0.402	1.63	0.127	0.290	0.436	0.149	0.292	0.292
LOW	0.035	0.196	0.010	0.650	0.150	0.020	0.060	0.120	2.06	0.110	0.060	0.060	0.060	0.530	0.410
HIGH	0.300	0.930	0.125	4.875	0.825	0.116	0.810	1.700	8.31	0.640	0.870	1.440	0.745	1.710	1.700

BONITO, PAC. SARDA CHILIENSIS 091009 AREA- CALIFORNIA SITE- I8 LIVER

LENGTH NUM 1 MEAN 0.346 S. D. 0.000 LOW 0.346 HIGH 0.346
WEIGHT NUM 1 MEAN 0.454 S. D. 0.000 LOW 0.454 HIGH 0.454

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.050	0.500	1.360	1.050	0.000	0.060	0.130	4.690	21.25	0.260	0.310	0.000	0.710	1.000	1.130
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.050	0.500	1.360	1.050	0.000	0.060	0.130	4.690	21.25	0.260	0.310	0.000	0.710	1.000	1.130

BONITO, PAC. SARDA CHILIENSIS 091009 AREA- CALIFORNIA SITE- K3 MUSCLE

LENGTH NUM 10 MEAN 0.448 S. D. 0.011 LOW 0.436 HIGH 0.470
WEIGHT NUM 20 MEAN 0.944 S. D. 0.275 LOW 0.681 HIGH 1.360

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020	0020
N DET.	0000	0000	0002	0000	0000	0003	0001	0000	0000	0000	0018	0019	0000	0002	0000
MEAN	0.120	0.587	0.125	2.695	0.563	0.034	0.247	0.887	6.35	0.228	0.995	0.260	0.154	0.806	0.542
S. D.	0.040	0.368	0.082	1.628	0.201	0.023	0.173	0.364	1.49	0.112	0.177	0.000	0.057	0.323	0.127
LOW	0.035	0.190	0.050	0.400	0.050	0.010	0.045	0.130	2.63	0.040	0.870	0.000	0.070	0.380	0.310
HIGH	0.225	1.560	0.410	7.700	0.910	0.110	0.750	1.410	9.06	0.460	1.120	0.260	0.310	1.500	0.740

BONITO, ATL. SARDA SARDA 091011 AREA- GULF SITE- E5 MUSCLE

LENGTH NUM 2 MEAN 0.533 S. D. 0.000 LOW 0.533 HIGH 0.533
WEIGHT NUM 2 MEAN 5.221 S. D. 0.000 LOW 5.221 HIGH 5.221

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.530	0.546	0.223	2.560	1.316	0.040	0.644	1.956	10.01	0.631	0.000	0.000	0.359	0.435	0.375
S. D.	0.042	0.192	0.095	0.000	0.000	0.000	0.097	0.105	2.02	0.086	0.000	0.000	0.016	0.346	0.177
LOW	0.500	0.410	0.156	0.000	0.000	0.000	0.575	1.882	8.58	0.570	0.000	0.000	0.347	0.190	0.250
HIGH	0.560	0.682	0.290	2.560	1.316	0.040	0.712	2.030	11.43	0.692	0.000	0.000	0.370	0.680	0.500

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

BONITO, ATL. SARDA SARDA 091011 AREA- GULF SITE- L5 MUSCLE

NGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
EIGHT NUM 10 MEAN 5.380 S. D. 0.939 LOW 4.086 HIGH 7.491

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013
DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0013	0013	0000	0013	0000
EAN	1.836	0.314	0.070	2.424	1.400	0.025	0.239	1.033	6.05	0.247	0.000	0.000	0.149	0.000	0.582
D.	0.734	0.113	0.017	2.026	0.448	0.012	0.167	0.587	1.88	0.075	0.000	0.000	0.052	0.000	0.151
LOW	0.910	0.130	0.040	0.575	0.390	0.010	0.060	0.040	2.25	0.110	0.000	0.000	0.060	0.000	0.380
HIGH	3.000	0.500	0.100	8.600	2.100	0.040	0.560	2.190	9.06	0.440	0.000	0.000	0.260	0.000	0.840

MACKEREL, CHUB SCOMBER JAPONICUS 091012 AREA- CALIFORNIA SITE- I8 MUSCLE

LENGTH NUM 20 MEAN 0.250 S. D. 0.000 LOW 0.250 HIGH 0.250
WEIGHT NUM 20 MEAN 0.454 S. D. 0.000 LOW 0.454 HIGH 0.454

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0020	0020	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0019	0020	0020
DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0012	0001	0001	0000
MEAN	0.093	0.704	0.127	2.311	0.612	0.034	0.185	0.658	8.79	0.204	0.166	0.409	0.143	0.691	0.510
S. D.	0.039	0.382	0.161	1.088	0.304	0.020	0.138	0.465	3.10	0.099	0.091	0.257	0.036	0.192	0.180
LOW	0.030	0.250	0.040	0.290	0.170	0.010	0.060	0.060	4.94	0.070	0.060	0.060	0.060	0.440	0.280
IGH	0.190	1.655	0.720	4.400	1.380	0.095	0.560	2.200	17.90	0.480	0.310	0.810	0.190	1.065	0.960

MACKEREL, CHUB SCOMBER JAPONICUS 091012 AREA- CALIFORNIA SITE- K3 MUSCLE

LENGTH NUM 10 MEAN 0.300 S. D. 0.000 LOW 0.300 HIGH 0.300
WEIGHT NUM 10 MEAN 0.340 S. D. 0.000 LOW 0.340 HIGH 0.340

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0008
N DET.	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000	0004	0008	0000	0000	0000
MEAN	0.077	0.557	0.072	1.993	0.591	0.035	0.152	0.904	6.69	0.159	0.160	0.500	0.132	0.727	0.531
S. D.	0.020	0.117	0.029	0.653	0.227	0.014	0.104	0.344	1.10	0.025	0.084	0.622	0.027	0.282	0.097
OW	0.040	0.435	0.045	1.000	0.300	0.015	0.040	0.250	4.25	0.130	0.060	0.060	0.100	0.190	0.380
IGH	0.095	0.780	0.130	3.000	1.010	0.060	0.345	1.240	8.09	0.210	0.250	0.940	0.190	1.190	0.630

MACKEREL, ATL. SCOMBER SCOMBRUS 091013 AREA- NORTH ATLANTIC SITE- K5 MUSCLE

ENGTH NUM 8 MEAN 0.284 S. D. 0.012 LOW 0.270 HIGH 0.300
EIGHT NUM 6 MEAN 0.232 S. D. 0.024 LOW 0.207 HIGH 0.267

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0005	0000	0000	0000	0000	0002	0001	0000	0000	0000	0007	0007	0000	0000	0000
EAN	0.050	0.423	0.065	3.726	0.684	0.030	0.083	0.503	6.35	0.218	0.120	0.630	0.141	0.626	0.385
. D.	0.052	0.130	0.019	1.967	0.290	0.006	0.034	0.274	1.06	0.035	0.000	0.000	0.023	0.259	0.099
OW	0.020	0.250	0.040	1.750	0.180	0.020	0.050	0.120	5.20	0.180	0.000	0.000	0.090	0.370	0.220
IGH	0.110	0.630	0.100	8.000	1.150	0.040	0.130	1.000	7.81	0.280	0.120	0.630	0.165	1.000	0.540

MACKEREL, ATL. SCOMBER SCOMBRUS 091013 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

LENGTH NUM 1 MEAN 0.192 S. D. 0.000 LOW 0.192 HIGH 0.192
WEIGHT NUM 1 MEAN 0.059 S. D. 0.000 LOW 0.059 HIGH 0.059

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.050	0.500	0.090	4.415	0.900	0.030	0.130	1.060	7.38	0.320	0.000	0.000	0.160	0.880	0.440
. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.050	0.500	0.090	4.415	0.900	0.030	0.130	1.060	7.38	0.320	0.000	0.000	0.160	0.880	0.440

MACKEREL, ATL. SCOMBER SCOMBRUS 091013 AREA- NORTH ATLANTIC SITE- N6 MUSCLE

ENGTH NUM 5 MEAN 0.278 S. D. 0.035 LOW 0.254 HIGH 0.335
WEIGHT NUM 5 MEAN 0.210 S. D. 0.092 LOW 0.146 HIGH 0.364

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0004	0000	0005	0000
MEAN	0.020	0.544	0.110	1.107	0.384	0.063	0.242	0.600	5.99	0.348	0.000	0.160	0.129	0.000	0.538
S. D.	0.000	0.274	0.025	0.889	0.252	0.021	0.121	0.276	0.95	0.083	0.000	0.000	0.017	0.000	0.072
LOW	0.020	0.310	0.080	0.360	0.120	0.030	0.060	0.280	4.88	0.230	0.000	0.000	0.100	0.000	0.440
HIGH	0.020	0.940	0.140	2.580	0.690	0.080	0.370	0.860	7.40	0.420	0.000	0.160	0.140	0.000	0.630

MACKEREL, ATL. SCOMBER SCOMBRUS 091013 AREA- NORTH ATLANTIC SITE- O2 MUSCLE

LENGTH NUM 11 MEAN 0.365 S. D. 0.015 LOW 0.348 HIGH 0.396
WEIGHT NUM 11 MEAN 0.440 S. D. 0.072 LOW 0.332 HIGH 0.587

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0010	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0004	0000	0000	0000	0000	0001	0000	0000	0000	0000	0006	0008	0000	0000	0000
MEAN	0.069	0.425	0.068	2.218	0.612	0.035	0.190	0.733	7.90	0.223	0.162	0.167	0.163	0.638	0.532
S. D.	0.047	0.171	0.033	0.788	0.213	0.016	0.134	0.407	1.26	0.051	0.147	0.097	0.040	0.172	0.169
LOW	0.020	0.190	0.025	1.125	0.290	0.015	0.060	0.225	5.28	0.150	0.060	0.060	0.105	0.310	0.205
HIGH	0.160	0.750	0.140	3.375	0.980	0.060	0.440	1.540	9.42	0.315	0.380	0.250	0.230	0.840	0.730

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

MACKEREL, ATL. SCOMBER SCOMBRUS 091013 AREA- NORTH ATLANTIC SITE- P1 MUSCLE

LENGTH	NUM	5	MEAN	0.336	S. D.	0.010	LOW	0.324	HIGH	0.349
WEIGHT	NUM	5	MEAN	0.407	S. D.	0.043	LOW	0.339	HIGH	0.446

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0006	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0005	0000	0000	0000
MEAN	0.033	0.594	0.060	2.555	0.660	0.027	0.306	0.878	6.38	0.192	0.060	0.080	0.129	0.688	0.662
S. D.	0.012	0.425	0.017	0.782	0.085	0.010	0.158	0.390	0.86	0.080	0.000	0.057	0.045	0.053	0.088
LOW	0.020	0.190	0.040	1.325	0.570	0.020	0.110	0.190	5.28	0.095	0.000	0.040	0.070	0.620	0.530
HIGH	0.040	1.370	0.080	3.600	0.820	0.040	0.490	1.250	7.63	0.340	0.060	0.120	0.200	0.755	0.750

MACKEREL, ATL. SCOMBER SCOMBRUS 091013 AREA- NORTH ATLANTIC SITE- P2 MUSCLE

LENGTH	NUM	12	MEAN	0.349	S. D.	0.019	LOW	0.326	HIGH	0.392
WEIGHT	NUM	10	MEAN	0.443	S. D.	0.154	LOW	0.324	HIGH	0.848

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0011	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012
N DET.	0002	0000	0000	0000	0000	0000	0001	0000	0000	0000	0008	0006	0000	0000	0000
MEAN	0.066	0.378	0.071	1.784	0.729	0.033	0.139	0.918	6.59	0.231	0.190	0.593	0.142	0.805	0.605
S. D.	0.036	0.110	0.037	0.817	0.251	0.014	0.070	0.239	1.64	0.034	0.085	0.622	0.038	0.247	0.145
LOW	0.030	0.190	0.035	0.575	0.180	0.020	0.060	0.420	3.93	0.190	0.130	0.060	0.090	0.470	0.380
HIGH	0.150	0.560	0.170	2.966	1.170	0.060	0.310	1.230	8.94	0.310	0.310	1.560	0.220	1.130	0.840

MACKEREL, ATL. SCOMBER SCOMBRUS 091013 AREA- NORTH ATLANTIC SITE- S1 MUSCLE

LENGTH	NUM	3	MEAN	0.214	S. D.	0.039	LOW	0.176	HIGH	0.253
WEIGHT	NUM	20	MEAN	0.405	S. D.	0.138	LOW	0.042	HIGH	0.462

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0036	0033	0036	0035	0036	0036	0036	0036	0035	0036	0036	0036	0036	0036	0035
N DET.	0017	0000	0000	0000	0000	0000	0002	0000	0000	0000	0032	0034	0000	0023	0000
MEAN	0.046	0.407	0.082	2.351	0.598	0.032	0.240	0.682	5.53	0.188	0.120	0.220	0.141	0.775	0.574
S. D.	0.027	0.246	0.035	1.458	0.273	0.009	0.179	0.445	1.38	0.066	0.042	0.127	0.064	0.209	0.188
LOW	0.020	0.190	0.040	0.900	0.130	0.010	0.060	0.070	1.94	0.050	0.060	0.130	0.040	0.470	0.310
HIGH	0.120	1.310	0.220	6.650	1.520	0.055	0.830	1.690	8.56	0.395	0.160	0.310	0.450	1.130	1.000

MACKEREL, KING SCOMBEROMORUS CAVALLA 091014 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH	NUM	20	MEAN	0.867	S. D.	0.144	LOW	0.601	HIGH	1.170
WEIGHT	NUM	20	MEAN	4.368	S. D.	3.018	LOW	1.134	HIGH	13.393

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0020	0019
N DET.	0000	0001	0004	0000	0000	0004	0001	0000	0000	0001	0016	0015	0001	0004	0000
MEAN	0.336	0.603	0.085	4.668	0.630	0.038	0.228	0.216	6.81	0.252	0.233	0.282	0.109	0.639	0.551
S. D.	0.238	0.334	0.041	4.012	0.300	0.012	0.082	0.119	2.20	0.122	0.159	0.156	0.041	0.282	0.160
LOW	0.075	0.130	0.030	0.620	0.090	0.025	0.130	0.040	4.59	0.030	0.060	0.110	0.040	0.190	0.250
HIGH	1.090	1.440	0.170	17.550	1.380	0.070	0.440	0.500	11.20	0.520	0.440	0.500	0.210	1.120	0.845

MACKEREL, KING SCOMBEROMORUS CAVALLA 091014 AREA- SOUTH ATLANTIC SITE- C2 LIVER

LENGTH	NUM	1	MEAN	0.963	S. D.	0.000	LOW	0.963	HIGH	0.963
WEIGHT	NUM	1	MEAN	6.262	S. D.	0.000	LOW	6.262	HIGH	6.262

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	1.580	0.440	0.690	0.580	1.950	0.040	0.310	13.750	47.00	0.310	0.390	0.000	0.280	0.000	0.280
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	1.580	0.440	0.690	0.580	1.950	0.040	0.310	13.750	47.00	0.310	0.390	0.000	0.280	0.000	0.280

MACKEREL, KING SCOMBEROMORUS CAVALLA 091014 AREA- GULF SITE- B8 MUSCLE

LENGTH	NUM	13	MEAN	0.855	S. D.	0.228	LOW	0.260	HIGH	1.240
WEIGHT	NUM	13	MEAN	6.022	S. D.	2.780	LOW	3.178	HIGH	12.485

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013
N DET.	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000	0012	0011	0000	0000	0000
MEAN	0.988	0.572	0.064	2.026	0.965	0.031	0.152	0.263	6.90	0.224	0.130	0.235	0.101	0.653	0.449
S. D.	0.431	0.182	0.016	0.723	0.255	0.008	0.093	0.139	1.88	0.046	0.000	0.064	0.016	0.123	0.128
LOW	0.350	0.375	0.040	1.025	0.635	0.020	0.060	0.120	4.38	0.160	0.000	0.190	0.070	0.440	0.220
HIGH	2.000	0.905	0.105	3.200	1.510	0.050	0.380	0.470	11.25	0.320	0.130	0.280	0.125	0.875	0.590

MACKEREL, KING SCOMBEROMORUS CAVALLA 091014 AREA- GULF SITE- B8 LIVER

LENGTH	NUM	3	MEAN	0.900	S. D.	0.067	LOW	0.849	HIGH	0.975
WEIGHT	NUM	3	MEAN	6.158	S. D.	1.712	LOW	4.733	HIGH	8.058

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0002	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0002	0000	0000	0000
MEAN	3.030	0.690	1.460	1.805	5.913	0.040	0.103	7.837	40.57	0.260	0.273	0.280	1.280	0.667	0.773
S. D.	1.135	0.271	0.874	1.471	0.548	0.000	0.075	0.957	4.50	0.070	0.199	0.000	0.151	0.072	0.295
LOW	1.840	0.380	0.760	0.150	5.525	0.040	0.060	7.000	37.38	0.190	0.130	0.000	1.110	0.620	0.440
HIGH	4.100	0.880	2.440	2.965	6.300	0.040	0.190	8.880	43.75	0.330	0.500	0.280	1.400	0.750	1.000

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                                          TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                 REPORT   MF17
                                          IN RESOURCE SURVEY SPECIES;
ATION LEVEL 5                             BY TISSUE AND LOCATION

KEREL, KING                    SCOMBEROMORUS CAVALLA            091014   AREA- GULF                    SITE- B8   MILT

 TH        NUM    1   MEAN       0.798   S. D.      0.000   LOW       0.798   HIGH        0.798
 HT        NUM    1   MEAN       4.086   S. D.      0.000   LOW       4.086   HIGH        4.086
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM

 ER        0001    0001    0001    0001    0001    0001    0001    0001    0001    0001     0001    0001    0001    0001     0001
 T.        0000    0000    0000    0000    0000    0000    0000    0000    0000    0000     0001    0001    0000    0001     0000
          0.220   0.300   0.080   2.900   0.810   0.010   0.190   5.560   17.50   0.410    0.000   0.000   0.190   0.000    0.940
 D.       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000    0.000
OW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000    0.000
IGH       0.220   0.300   0.080   2.900   0.810   0.010   0.190   5.560   17.50   0.410    0.000   0.000   0.190   0.000    0.940

KEREL, KING                    SCOMBEROMORUS CAVALLA            091014   AREA- GULF                    SITE- B8   ROE

GTH        NUM    9   MEAN       0.855   S. D.      0.271   LOW       0.260   HIGH        1.240
EIGHT      NUM    9   MEAN       6.350   S. D.      3.066   LOW       3.178   HIGH       12.485
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM

 BER       0009    0009    0009    0008    0008    0009    0009    0009    0008    0009     0009    0009    0009    0009     0009
 ET.       0002    0000    0000    0000    0000    0000    0000    0000    0000    0000     0009    0007    0000    0008     0000
EAN       0.199   0.288   0.063   2.561   3.136   0.025   0.154   1.381   65.94   0.267    0.000   0.095   0.524   0.060    0.576
. D.      0.198   0.173   0.010   1.212   1.870   0.008   0.073   0.916   13.68   0.076    0.000   0.049   0.324   0.000    0.168
OW        0.020   0.060   0.050   1.350   1.665   0.010   0.060   0.030   41.91   0.140    0.000   0.060   0.250   0.000    0.380
 H        0.630   0.630   0.085   4.750   7.500   0.035   0.250   2.560   81.25   0.390    0.000   0.130   1.250   0.060    0.840

CKEREL, KING                   SCOMBEROMORUS CAVALLA            091014   AREA- GULF                    SITE- E5   MUSCLE

ENGTH      NUM   40   MEAN       0.717   S. D.      0.073   LOW       0.530   HIGH        0.949
EIGHT      NUM   43   MEAN       2.173   S. D.      0.817   LOW       1.180   HIGH        5.485
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM

 BER       0043    0043    0043    0042    0042    0043    0042    0043    0043    0043     0043    0043    0043    0043     0041
 DET.      0000    0000    0002    0001    0000    0008    0002    0000    0000    0000     0037    0037    0000    0002     0000
EAN       0.290   0.444   0.069   3.201   0.817   0.032   0.197   0.269    4.98   0.219    0.183   0.278   0.096   0.775    0.558
 D.       0.153   0.200   0.023   1.502   0.266   0.007   0.174   0.108    1.29   0.080    0.136   0.118   0.034   0.296    0.162
          0.040   0.170   0.020   0.900   0.250   0.020   0.060   0.070    0.94   0.070    0.060   0.190   0.020   0.190    0.190
 GH       0.720   1.310   0.130   7.160   1.450   0.055   0.750   0.530    8.00   0.540    0.440   0.500   0.210   1.575    1.120

MACKEREL, KING                 SCOMBEROMORUS CAVALLA            091014   AREA- GULF                    SITE- E5   LIVER

NGTH       NUM    4   MEAN       0.709   S. D.      0.020   LOW       0.684   HIGH        0.732
 IGHT      NUM    4   MEAN       2.266   S. D.      0.564   LOW       1.721   HIGH        2.797
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM

UMBER      0004    0004    0004    0004    0002    0004    0004    0004    0004    0004     0004    0004    0004    0004     0004
 DET.      0000    0000    0000    0000    0000    0001    0000    0000    0000    0000     0001    0002    0000    0000     0000
AN        0.408   0.488   0.598   4.426   8.913   0.023   0.145   6.075   41.40   0.220    0.313   0.190   0.760   0.390    0.485
 D.       0.344   0.296   0.432   1.457   2.740   0.006   0.132   3.520   26.06   0.145    0.162   0.000   0.356   0.155    0.314
W         0.210   0.130   0.090   2.550   6.975   0.020   0.020   1.440    7.50   0.030    0.220   0.190   0.260   0.190    0.060
GH        0.920   0.810   1.130   5.700  10.850   0.030   0.310  10.000   70.30   0.380    0.500   0.190   1.100   0.560    0.750

MACKEREL, KING                 SCOMBEROMORUS CAVALLA            091014   AREA- GULF                    SITE- E7   MUSCLE

NGTH       NUM    2   MEAN       0.738   S. D.      0.046   LOW       0.705   HIGH        0.770
IGHT       NUM    2   MEAN       3.516   S. D.      1.122   LOW       2.722   HIGH        4.309
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM

UMBER      0002    0002    0002    0002    0002    0002    0002    0002    0002    0002     0002    0002    0002    0002     0002
DET.       0000    0000    0001    0000    0000    0001    0000    0000    0000    0000     0002    0001    0000    0000     0000
EAN       0.405   0.170   0.060   1.863   1.158   0.010   0.245   0.360    5.80   0.303    0.000   0.100   0.050   1.615    0.538
 D.       0.064   0.071   0.000   0.866   0.060   0.000   0.205   0.099    3.16   0.081    0.000   0.000   0.028   0.304    0.088
OW        0.360   0.120   0.000   1.250   1.115   0.000   0.100   0.290    3.56   0.245    0.000   0.000   0.030   1.400    0.475
HIGH      0.450   0.220   0.060   2.475   1.200   0.010   0.390   0.430    8.03   0.360    0.000   0.100   0.070   1.830    0.600

MACKEREL, KING                 SCOMBEROMORUS CAVALLA            091014   AREA- GULF                    SITE- H2   MUSCLE

ENGTH      NUM    7   MEAN       0.845   S. D.      0.194   LOW       0.590   HIGH        1.165
EIGHT      NUM    7   MEAN       5.155   S. D.      3.764   LOW       1.703   HIGH       11.804
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM

UMBER      0007    0007    0007    0007    0007    0007    0006    0007    0007    0006     0007    0007    0007    0007     0007
 DET.      0000    0000    0002    0000    0000    0002    0000    0000    0000    0001     0006    0005    0000    0002     0000
EAN       0.626   0.527   0.064   1.780   0.712   0.034   0.225   0.283    5.28   0.233    0.190   0.345   0.114   0.682    0.449
S. D.     0.442   0.261   0.027   1.222   0.207   0.009   0.167   0.164    2.34   0.094    0.000   0.148   0.043   0.170    0.188
LOW       0.245   0.250   0.040   0.683   0.480   0.020   0.090   0.070    0.49   0.150    0.000   0.240   0.070   0.500    0.190
IGH       1.310   0.940   0.110   4.240   1.110   0.040   0.450   0.500    7.29   0.390    0.190   0.450   0.190   0.940    0.775

MACKEREL, KING                 SCOMBEROMORUS CAVALLA            091014   AREA- GULF                    SITE- H2   LIVER

LENGTH     NUM    1   MEAN       0.933   S. D.      0.000   LOW       0.933   HIGH        0.933
EIGHT      NUM    1   MEAN       7.105   S. D.      0.000   LOW       7.105   HIGH        7.105
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM      PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM     PPM      PPM

UMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001     0001    0001    0001    0001     0001
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000     0000    0000    0000    0000     0000
MEAN      3.700   0.715   1.310   1.160   2.920   0.080   0.105  10.000  121.09   0.295    0.120   0.310   1.160   0.610    0.560
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000    0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000    0.000   0.000   0.000   0.000    0.000
IGH       3.700   0.715   1.310   1.160   2.920   0.080   0.105  10.000  121.09   0.295    0.120   0.310   1.160   0.610    0.560
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

MACKEREL, KING   SCOMBEROMORUS CAVALLA   091014   AREA- GULF   SITE- H2   ROE

LENGTH NUM 2 MEAN 0.921 S. D. 0.171 LOW 0.800 HIGH 1.042
WEIGHT NUM 2 MEAN 6.583 S. D. 3.531 LOW 4.086 HIGH 9.080

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	000
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0002	0002	0000	0002	000
MEAN	0.105	0.220	0.060	0.850	1.900	0.015	0.190	1.210	57.51	0.270	0.000	0.000	0.515	0.000	0.51
S. D.	0.021	0.042	0.014	0.212	0.354	0.007	0.000	0.297	9.72	0.057	0.000	0.000	0.191	0.000	0.06
LOW	0.090	0.190	0.050	0.700	1.650	0.010	0.000	1.000	50.63	0.230	0.000	0.000	0.380	0.000	0.470
HIGH	0.120	0.250	0.070	1.000	2.150	0.020	0.190	1.420	64.38	0.310	0.000	0.000	0.650	0.000	0.560

MACKEREL, KING   SCOMBEROMORUS CAVALLA   091014   AREA- GULF   SITE- L5   MUSCLE

LENGTH NUM 1 MEAN 1.270 S. D. 0.000 LOW 1.270 HIGH 1.270
WEIGHT NUM 1 MEAN 15.150 S. D. 0.000 LOW 15.150 HIGH 15.150

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	000
MEAN	1.580	0.303	0.040	3.216	0.725	0.030	0.083	0.140	5.40	0.170	0.000	0.000	0.180	0.440	0.365
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	1.580	0.303	0.040	3.216	0.725	0.030	0.083	0.140	5.40	0.170	0.000	0.000	0.180	0.440	0.365

MACKEREL, KING   SCOMBEROMORUS CAVALLA   091014   AREA- GULF   SITE- L5   LIVER

LENGTH NUM 1 MEAN 1.270 S. D. 0.000 LOW 1.270 HIGH 1.270
WEIGHT NUM 1 MEAN 15.150 S. D. 0.000 LOW 15.150 HIGH 15.150

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	4.000	0.690	0.870	2.775	1.440	0.030	0.130	13.880	55.00	0.700	0.090	0.000	1.140	0.630	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	4.000	0.690	0.870	2.775	1.440	0.030	0.130	13.880	55.00	0.700	0.090	0.000	1.140	0.630	0.380

MACKEREL, KING   SCOMBEROMORUS CAVALLA   091014   AREA- GULF   SITE- L9   MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0002	0000	0000	0004	0001	0000	0000	0001	0006	0006	0000	0001	0000
MEAN	0.187	0.469	0.051	3.265	0.782	0.031	0.161	0.265	5.28	0.206	0.288	0.254	0.100	1.137	0.549
S. D.	0.053	0.308	0.017	2.030	0.251	0.010	0.099	0.073	1.22	0.083	0.299	0.190	0.057	0.485	0.201
LOW	0.115	0.185	0.030	1.200	0.500	0.020	0.040	0.180	3.45	0.100	0.060	0.060	0.055	0.565	0.300
HIGH	0.270	1.056	0.080	6.600	1.260	0.045	0.313	0.405	7.14	0.360	0.720	0.500	0.210	1.980	0.940

MACKEREL, KING   SCOMBEROMORUS CAVALLA   091014   AREA- GULF   SITE- R6   MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0009	0009	0011	0011	0011	0011	0010	0011	0011	0011	0011	0010
N DET.	0000	0001	0005	0001	0000	0007	0001	0000	0000	0001	0007	0008	0001	0004	0000
MEAN	0.156	0.418	0.054	3.377	0.903	0.030	0.219	0.252	4.83	0.186	0.390	0.385	0.085	0.853	0.592
S. D.	0.030	0.253	0.021	1.438	0.286	0.014	0.164	0.094	1.24	0.086	0.382	0.236	0.045	0.485	0.268
LOW	0.110	0.060	0.030	0.787	0.570	0.010	0.050	0.110	2.25	0.090	0.060	0.220	0.020	0.130	0.250
HIGH	0.205	0.750	0.090	4.530	1.480	0.040	0.550	0.410	6.78	0.360	0.750	0.655	0.155	1.630	1.200

MACKEREL, SPANISH   SCOMBEROMORUS MACULATUS   091016   AREA- SOUTH ATLANTIC   SITE- C2   MUSCLE

LENGTH NUM 20 MEAN 0.449 S. D. 0.016 LOW 0.426 HIGH 0.464
WEIGHT NUM 20 MEAN 0.557 S. D. 0.040 LOW 0.515 HIGH 0.596

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0003	0000	0004	0000	0000	0004	0000	0000	0000	0001	0017	0014	0000	0003	0000
MEAN	0.181	0.457	0.144	3.803	0.631	0.048	0.204	0.386	4.77	0.253	0.220	0.530	0.111	0.816	0.542
S. D.	0.086	0.199	0.189	1.923	0.182	0.034	0.131	0.142	0.70	0.179	0.130	0.337	0.029	0.429	0.175
LOW	0.065	0.200	0.040	0.980	0.300	0.010	0.060	0.040	3.75	0.040	0.090	0.250	0.040	0.310	0.200
HIGH	0.390	0.880	0.690	9.065	1.160	0.145	0.500	0.610	6.19	0.820	0.350	1.130	0.155	1.830	0.810

MACKEREL, SPANISH   SCOMBEROMORUS MACULATUS   091016   AREA- SOUTH ATLANTIC   SITE- C2   LIVER

LENGTH NUM 1 MEAN 0.464 S. D. 0.000 LOW 0.464 HIGH 0.464
WEIGHT NUM 1 MEAN 0.596 S. D. 0.000 LOW 0.596 HIGH 0.596

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.440	0.240	6.190	0.590	0.000	0.060	2.030	16.87	0.250	0.120	0.000	0.830	0.310	0.310
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.440	0.240	6.190	0.590	0.000	0.060	2.030	16.87	0.250	0.120	0.000	0.830	0.310	0.310

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

CKEREL, SPANISH SCOMBEROMORUS MACULATUS 091016 AREA- SOUTH ATLANTIC SITE- F6 MUSCLE

GTH NUM 2 MEAN 0.331 S. D. 0.023 LOW 0.314 HIGH 0.347
GHT NUM 2 MEAN 0.347 S. D. 0.107 LOW 0.271 HIGH 0.423

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
BER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
ET.	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000	0002	0002	0000	0001	0000
N	0.070	0.333	0.080	2.850	0.410	0.000	0.058	0.293	5.76	0.385	0.000	0.000	0.258	1.130	0.515
D.	0.028	0.095	0.014	3.041	0.127	0.000	0.011	0.039	0.95	0.318	0.000	0.000	0.187	0.000	0.120
OW	0.050	0.265	0.070	0.700	0.320	0.000	0.050	0.265	5.09	0.160	0.000	0.000	0.125	0.000	0.430
IGH	0.090	0.400	0.090	5.000	0.500	0.000	0.065	0.320	6.43	0.610	0.000	0.000	0.390	1.130	0.600

CKEREL, SPANISH SCOMBEROMORUS MACULATUS 091016 AREA- SOUTH ATLANTIC SITE- F6 LIVER

ENGTH NUM 1 MEAN 0.326 S. D. 0.000 LOW 0.326 HIGH 0.326
EIGHT NUM 1 MEAN 0.325 S. D. 0.000 LOW 0.325 HIGH 0.325

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
BER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
ET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
EAN	0.040	0.310	0.190	5.900	1.330	0.040	0.060	8.310	16.88	0.400	0.090	0.000	0.380	0.690	0.810
. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
OW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
H	0.040	0.310	0.190	5.900	1.330	0.040	0.060	8.310	16.88	0.400	0.090	0.000	0.380	0.690	0.810

ACKEREL, SPANISH SCOMBEROMORUS MACULATUS 091016 AREA- SOUTH ATLANTIC SITE- J1 MUSCLE

ENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
EIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
DET.	0000	0002	0003	0000	0000	0006	0001	0000	0000	0002	0007	0007	0001	0004	0000
EAN	0.256	0.305	0.064	2.971	0.450	0.010	0.165	0.400	5.61	0.212	0.280	0.500	0.098	0.761	0.485
D.	0.065	0.157	0.029	1.746	0.219	0.000	0.059	0.132	1.09	0.142	0.000	0.000	0.034	0.475	0.133
W	0.130	0.155	0.040	0.200	0.170	0.010	0.100	0.300	4.50	0.040	0.000	0.000	0.055	0.270	0.300
GH	0.320	0.550	0.110	6.000	0.800	0.010	0.240	0.680	7.93	0.370	0.280	0.500	0.140	1.250	0.650

MACKEREL, SPANISH SCOMBEROMORUS MACULATUS 091016 AREA- SOUTH ATLANTIC SITE- J4 MUSCLE

NGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
IGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0010	0011	0010	0010	0011	0010	0011	0011	0011	0011	0011	0011	0011	0010
DET.	0000	0000	0003	0000	0000	0003	0000	0000	0000	0001	0005	0007	0000	0003	0000
AN	0.307	0.456	0.074	2.333	0.560	0.036	0.369	0.390	7.57	0.264	0.277	0.438	0.110	1.083	0.677
D.	0.181	0.250	0.033	1.072	0.133	0.009	0.223	0.078	3.57	0.073	0.299	0.360	0.041	0.756	0.238
W	0.140	0.190	0.010	0.610	0.435	0.020	0.100	0.265	3.93	0.175	0.120	0.060	0.040	0.250	0.300
GH	0.730	0.975	0.120	4.400	0.895	0.050	0.835	0.495	17.04	0.390	0.880	0.840	0.180	2.450	1.115

MACKEREL, SPANISH SCOMBEROMORUS MACULATUS 091016 AREA- SOUTH ATLANTIC SITE- J7 MUSCLE

NGTH NUM 2 MEAN 0.365 S. D. 0.010 LOW 0.358 HIGH 0.372
IGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
MBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
DET.	0000	0000	0001	0000	0000	0002	0000	0000	0000	0000	0001	0002	0000	0000	0000
AN	0.128	0.608	0.040	5.818	0.680	0.000	0.193	0.518	8.51	0.215	0.110	0.000	0.108	1.313	0.608
D.	0.074	0.011	0.000	0.894	0.184	0.000	0.132	0.025	3.00	0.049	0.000	0.000	0.046	0.449	0.011
OW	0.075	0.600	0.000	5.185	0.550	0.000	0.100	0.500	6.39	0.180	0.000	0.000	0.075	0.995	0.600
HIGH	0.180	0.615	0.040	6.450	0.810	0.000	0.286	0.535	10.63	0.250	0.110	0.000	0.140	1.630	0.615

ACKEREL, SPANISH SCOMBEROMORUS MACULATUS 091016 AREA- GULF SITE- B8 MUSCLE

ENGTH NUM 3 MEAN 0.646 S. D. 0.054 LOW 0.584 HIGH 0.680
EIGHT NUM 3 MEAN 2.258 S. D. 0.406 LOW 1.956 HIGH 2.720

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
JMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
EAN	0.381	0.598	0.030	1.658	0.969	0.030	0.145	0.240	5.47	0.170	0.040	0.630	0.082	1.142	0.463
S. D.	0.172	0.185	0.017	0.649	0.111	0.010	0.053	0.164	0.53	0.013	0.000	0.000	0.024	0.503	0.058
LOW	0.223	0.470	0.010	0.915	0.880	0.020	0.090	0.050	4.92	0.155	0.000	0.000	0.055	0.625	0.410
IGH	0.565	0.810	0.040	2.110	1.093	0.040	0.196	0.343	5.97	0.180	0.040	0.630	0.100	1.630	0.525

MACKEREL, SPANISH SCOMBEROMORUS MACULATUS 091016 AREA- GULF SITE- E5 MUSCLE

LENGTH NUM 20 MEAN 0.561 S. D. 0.083 LOW 0.428 HIGH 0.710
WEIGHT NUM 20 MEAN 1.114 S. D. 0.500 LOW 0.452 HIGH 2.040

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
JMBER	0019	0020	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020	0020
N DET.	0000	0001	0001	0000	0000	0006	0002	0001	0000	0003	0015	0016	0001	0004	0000
MEAN	0.429	0.475	0.064	3.263	0.804	0.034	0.185	0.298	4.41	0.275	0.474	1.093	0.125	0.873	0.599
S. D.	0.266	0.224	0.031	2.018	0.194	0.008	0.076	0.125	0.95	0.132	0.486	0.873	0.041	0.347	0.179
OW	0.105	0.060	0.020	0.955	0.525	0.025	0.046	0.050	2.37	0.150	0.060	0.190	0.075	0.370	0.350
IGH	1.260	0.795	0.140	8.560	1.135	0.050	0.365	0.525	6.75	0.710	1.120	1.870	0.210	1.500	1.185

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                                  TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS
                                  IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                  BY TISSUE AND LOCATION


MACKEREL, SPANISH            SCOMBEROMORUS MACULATUS          091016   AREA- GULF                SITE- E5   LIVER

LENGTH     NUM    1   MEAN        0.586   S. D.     0.000   LOW      0.586   HIGH        0.586
WEIGHT     NUM    1   MEAN        1.196   S. D.     0.000   LOW      1.196   HIGH        1.196
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM      PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001    0001   0001    0001     0001   0001     0001    0001     000
N DET.     0000    0000    0000    0000    0000    0000    0000    0000   0000    0000     0000   0001     0000    0000     000
MEAN      0.620   0.620   0.540   2.425   2.000   0.040   0.190   3.190  35.94   0.300    0.190  0.000    1.210   0.720    0.62
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00   0.000    0.000  0.000    0.000   0.000    0.00
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00   0.000    0.000  0.000    0.000   0.000    0.000
HIGH      0.620   0.620   0.540   2.425   2.000   0.040   0.190   3.190  35.94   0.300    0.190  0.000    1.210   0.720    0.620

MACKEREL, SPANISH            SCOMBEROMORUS MACULATUS          091016   AREA- GULF                SITE- L5   MUSCLE

LENGTH     NUM   28   MEAN        0.357   S. D.     0.055   LOW      0.264   HIGH        0.537
WEIGHT     NUM   28   MEAN        0.462   S. D.     0.131   LOW      0.182   HIGH        0.780
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM      PPM

NUMBER     0028    0028    0027    0025    0026    0028    0028    0028   0028    0028     0028   0028     0028    0028     0027
N DET.     0000    0002    0007    0000    0000    0008    0001    0001   0000    0003     0019   0023     0000    0003     000
MEAN      0.274   0.499   0.052   5.778   0.792   0.047   0.205   0.547   4.22   0.245    0.262  0.352    0.095   0.981    0.530
S. D.     0.084   0.256   0.021   3.487   0.290   0.037   0.133   0.673   1.63   0.152    0.213  0.233    0.036   0.597    0.137
LOW       0.070   0.120   0.010   1.390   0.240   0.010   0.040   0.050   0.50   0.030    0.060  0.100    0.020   0.060    0.250
HIGH      0.420   1.000   0.090  14.000   1.520   0.190   0.600   3.210   7.94   0.750    0.620  0.630    0.170   2.550    0.775

MACKEREL, SPANISH            SCOMBEROMORUS MACULATUS          091016   AREA- GULF                SITE- L5   LIVER

LENGTH     NUM    1   MEAN        0.393   S. D.     0.000   LOW      0.393   HIGH        0.393
WEIGHT     NUM    1   MEAN        0.563   S. D.     0.000   LOW      0.563   HIGH        0.563
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM      PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001    0001   0001    0001     0001   0001     0001    0001     0001
N DET.     0000    0000    0000    0000    0000    0000    0001    0000   0000    0000     0000   0000     0000    0000     0000
MEAN      0.100   0.060   0.060   2.375   3.200   0.020   0.000   1.750   6.81   0.120    0.870  0.120    0.270   0.500    0.560
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00   0.000    0.000  0.000    0.000   0.000    0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00   0.000    0.000  0.000    0.000   0.000    0.000
HIGH      0.100   0.060   0.060   2.375   3.200   0.020   0.000   1.750   6.81   0.120    0.870  0.120    0.270   0.500    0.560

MACKEREL, SPANISH            SCOMBEROMORUS MACULATUS          091016   AREA- GULF                SITE- L9   MUSCLE

LENGTH     NUM    0   MEAN        0.000   S. D.     0.000   LOW      0.000   HIGH        0.000
WEIGHT     NUM    0   MEAN        0.000   S. D.     0.000   LOW      0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM      PPM

NUMBER     0016    0015    0015    0015    0015    0015    0015    0014   0015    0015     0015   0015     0015    0015     0015
N DET.     0000    0000    0000    0000    0000    0001    0002    0000   0000    0000     0008   0008     0000    0000     0000
MEAN      0.811   0.425   0.060   2.677   1.099   0.044   0.112   0.288   4.50   0.181    0.309  0.484    0.097   0.851    0.470
S. D.     0.333   0.234   0.038   1.402   0.713   0.020   0.068   0.110   1.14   0.066    0.289  0.692    0.027   0.356    0.237
LOW       0.380   0.120   0.020   0.400   0.510   0.010   0.050   0.030   3.06   0.090    0.060  0.090    0.060   0.440    0.120
HIGH      1.560   1.060   0.170   5.545   3.020   0.080   0.250   0.470   6.62   0.325    0.870  2.000    0.150   1.690    1.000

TUNA, ALBACORE               THUNNUS ALALUNGA                 091019   AREA- CALIFORNIA          SITE-      MUSCLE

LENGTH     NUM   20   MEAN        0.634   S. D.     0.062   LOW      0.490   HIGH        0.690
WEIGHT     NUM   10   MEAN        3.950   S. D.     1.173   LOW      2.270   HIGH        4.994
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM      PPM

NUMBER     0019    0019    0020    0020    0020    0020    0020    0020   0020    0020     0020   0020     0020    0020     0020
N DET.     0000    0000    0001    0000    0000    0004    0001    0000   0000    0000     0014   0016     0000    0003     0000
MEAN      0.156   0.472   0.073   4.022   1.375   0.041   0.326   0.373   3.96   0.178    0.160  0.343    0.116   0.757    0.485
S. D.     0.057   0.245   0.054   1.921   1.333   0.071   0.212   0.185   0.86   0.067    0.144  0.387    0.079   0.335    0.169
LOW       0.040   0.150   0.030   1.675   0.280   0.010   0.080   0.120   2.00   0.060    0.050  0.050    0.055   0.190    0.030
HIGH      0.250   0.880   0.280  10.240   6.730   0.300   0.730   0.855   5.67   0.360    0.440  0.910    0.430   1.283    0.780

TUNA, ALBACORE               THUNNUS ALALUNGA                 091019   AREA- CALIFORNIA          SITE-      LIVER

LENGTH     NUM    2   MEAN        0.634   S. D.     0.035   LOW      0.609   HIGH        0.659
WEIGHT     NUM    1   MEAN        3.950   S. D.     0.000   LOW      3.950   HIGH        3.950
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM      PPM

NUMBER     0002    0002    0002    0002    0002    0002    0002    0002   0002    0002     0002   0002     0002    0002     0002
N DET.     0000    0000    0000    0000    0000    0000    0000    0000   0000    0000     0000   0002     0000    0000     0000
MEAN      0.130   0.880   5.590   4.850  21.550   0.155   0.630   8.475  43.53   0.205    0.455  0.000    0.930   1.190    0.690
S. D.     0.028   0.354   4.016   5.020  11.526   0.191   0.354   1.633   6.51   0.035    0.247  0.000    0.396   0.622    0.438
LOW       0.110   0.630   2.750   1.300  13.400   0.020   0.380   7.320  38.93   0.180    0.280  0.000    0.650   0.750    0.380
HIGH      0.150   1.130   8.430   8.400  29.700   0.290   0.880   9.630  48.13   0.230    0.630  0.000    1.210   1.630    1.000

TUNA, ALBACORE               THUNNUS ALALUNGA                 091019   AREA- CALIFORNIA          SITE- B8   MUSCLE

LENGTH     NUM   10   MEAN        0.609   S. D.     0.052   LOW      0.515   HIGH        0.670
WEIGHT     NUM   10   MEAN        4.853   S. D.     1.158   LOW      2.724   HIGH        6.129
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM      PPM

NUMBER     0010    0008    0010    0010    0010    0010    0010    0010   0010    0010     0010   0010     0010    0010     0009
N DET.     0000    0000    0000    0000    0000    0002    0000    0000   0000    0000     0010   0008     0000    0000     0000
MEAN      0.147   0.329   0.101   2.091   0.896   0.018   0.248   0.224   3.50   0.131    0.000  0.220    0.118   0.631    0.402
S. D.     0.047   0.119   0.085   1.330   0.233   0.007   0.155   0.109   0.88   0.057    0.000  0.042    0.044   0.197    0.100
LOW       0.080   0.110   0.040   0.825   0.550   0.010   0.060   0.070   2.00   0.050    0.000  0.190    0.060   0.380    0.310
HIGH      0.250   0.500   0.330   4.166   1.375   0.030   0.500   0.400   4.38   0.240    0.000  0.250    0.210   0.940    0.560
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                                             TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   MF17
                                            IN RESOURCE SURVEY SPECIES;
OCATION LEVEL 5                             BY TISSUE AND LOCATION

 A, ALBACORE                     THUNNUS ALALUNGA                     091019   AREA- CALIFORNIA          SITE- B8   LIVER

 TH     NUM   1   MEAN        0.609   S. D.      0.000   LOW      0.609   HIGH       0.609
 HT     NUM   1   MEAN        4.852   S. D.      0.000   LOW      4.852   HIGH       4.852
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

 ER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0000
 T.      0000    0000    0000    0000    0000    0001    0000    0000    0000    0000    0000    0000    0000    0000    0000
        0.120   0.690   5.380   5.650   8.700   0.000   0.060   0.880   21.88   0.050   0.250   0.310   0.460   0.190   0.000
 D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
W       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
GH      0.120   0.690   5.380   5.650   8.700   0.000   0.060   0.880   21.88   0.050   0.250   0.310   0.460   0.190   0.000

 A, ALBACORE                     THUNNUS ALALUNGA                     091019   AREA- PACIFIC NORTHWEST   SITE- F1   MUSCLE

NGTH    NUM  10   MEAN        0.626   S. D.      0.014   LOW      0.610   HIGH       0.650
IGHT    NUM  10   MEAN        5.416   S. D.      0.384   LOW      4.762   HIGH       5.987
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

 ER      0010    0009    0010    0010    0010    0010    0010    0010    0009    0009    0010    0010    0010    0010    0010
 T.      0000    0001    0003    0000    0000    0005    0000    0000    0000    0001    0005    0009    0000    0004    0000
AN      0.159   0.377   0.079   3.308   0.836   0.037   0.197   0.417    3.77   0.173   0.337   0.280   0.127   0.848   0.528
 D.     0.036   0.158   0.051   1.040   0.268   0.020   0.171   0.178    1.20   0.102   0.273   0.000   0.120   0.457   0.197
W       0.110   0.175   0.010   1.255   0.285   0.020   0.037   0.160    2.64   0.040   0.025   0.000   0.040   0.336   0.330
        0.240   0.603   0.140   4.750   1.200   0.070   0.605   0.640    6.52   0.390   0.720   0.280   0.430   1.700   0.940

 A, ALBACORE                     THUNNUS ALALUNGA                     091019   AREA- PACIFIC NORTHWEST   SITE- F1   LIVER

NGTH    NUM   2   MEAN        0.626   S. D.      0.000   LOW      0.626   HIGH       0.626
IGHT    NUM   2   MEAN        5.416   S. D.      0.128   LOW      5.325   HIGH       5.506
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

 BER     0002    0002    0002    0001    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002
DET.     0000    0001    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000
AN      0.140   1.380   2.355   2.136  12.238   0.095   0.070   7.560   36.88   0.165   0.640   0.310   0.745   0.810   0.845
 D.     0.014   0.000   0.375   0.000   4.331   0.021   0.085   2.828   18.56   0.049   0.679   0.269   0.445   0.354   0.219
        0.130   0.000   2.090   0.000   9.175   0.080   0.010   5.560   23.75   0.130   0.160   0.120   0.430   0.560   0.690
 H      0.150   1.380   2.620   2.136  15.300   0.110   0.130   9.560   50.00   0.200   1.120   0.500   1.060   1.060   1.000

UNA, YELLOWFIN                   THUNNUS ALBACARES                    091020   AREA- HAWAII              SITE- D4   MUSCLE

 GTH    NUM   0   MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
 GHT    NUM   1   MEAN       30.844   S. D.      0.000   LOW     30.844   HIGH      30.844
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

MBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0001    0000    0000    0000
 N      0.210   0.440   0.060   2.075   0.870   0.020   0.250   0.250    3.31   0.200   0.000   0.000   0.200   0.870   0.500
 D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 H      0.210   0.440   0.060   2.075   0.870   0.020   0.250   0.250    3.31   0.200   0.000   0.000   0.200   0.870   0.500

NA, YELLOWFIN                    THUNNUS ALBACARES                    091020   AREA- HAWAII              SITE- D5   MUSCLE

 GTH    NUM   6   MEAN        1.527   S. D.      0.135   LOW      1.375   HIGH       1.755
 GHT    NUM   8   MEAN       71.782   S. D.     21.585   LOW     46.720   HIGH     107.957
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

 BER     0008    0008    0008    0007    0007    0008    0008    0008    0008    0008    0008    0008    0008    0008    0008
 ET.     0000    0001    0002    0000    0000    0005    0000    0000    0000    0002    0006    0006    0001    0002    0000
 N      0.296   0.428   0.051   3.321   1.232   0.028   0.236   0.262    3.67   0.243   0.590   0.740   0.061   0.787   0.534
 D.     0.108   0.136   0.014   2.658   0.647   0.003   0.159   0.082    1.34   0.144   0.750   0.622   0.017   0.296   0.168
W       0.145   0.225   0.035   1.455   0.585   0.025   0.100   0.190    2.45   0.060   0.060   0.300   0.040   0.400   0.310
GH      0.475   0.600   0.070   8.240   2.570   0.030   0.590   0.370    6.78   0.500   1.120   1.180   0.080   1.215   0.845

NA, YELLOWFIN                    THUNNUS ALBACARES                    091020   AREA- HAWAII              SITE- D5   LIVER

NGTH    NUM   3   MEAN        1.603   S. D.      0.134   LOW      1.500   HIGH       1.755
IGHT    NUM   3   MEAN       82.858   S. D.     22.117   LOW     66.226   HIGH     107.957
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

MBER     0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003
DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0000    0002    0000    0003    0000
AN      0.343   0.267  10.363   6.795  20.330   0.140   0.143  25.307  168.19   0.275   0.297   0.130   1.357   0.000   0.540
 D.     0.215   0.067   7.696   2.847  17.621   0.182   0.101  24.947  115.67   0.021   0.099   0.000   0.257   0.000   0.095
W       0.160   0.190   5.310   3.550   3.990   0.020   0.050   9.420   95.31   0.260   0.230   0.000   1.060   0.000   0.440
GH      0.580   0.310  19.220   8.875  39.000   0.350   0.250  54.060  301.56   0.290   0.410   0.130   1.510   0.000   0.630

UNA, YELLOWFIN                   THUNNUS ALBACARES                    091020   AREA- HAWAII              SITE- D6   MUSCLE

NGTH    NUM   0   MEAN        0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
IGHT    NUM  10   MEAN        2.489   S. D.      0.253   LOW      2.041   HIGH       2.948
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

MBER     0010    0010    0010    0010    0010    0010    0010    0010    0010    0009    0010    0010    0009    0010    0010
DET.     0003    0000    0000    0000    0000    0002    0001    0000    0000    0000    0009    0009    0000    0000    0000
AN      0.054   0.457   0.062   4.037   1.524   0.028   0.162   0.564    4.34   0.182   0.190   0.560   0.105   0.664   0.559
 D.     0.034   0.102   0.014   1.408   0.469   0.008   0.114   0.222    1.63   0.056   0.000   0.000   0.031   0.309   0.293
W       0.020   0.310   0.040   2.410   0.770   0.020   0.060   0.310    2.69   0.120   0.000   0.000   0.060   0.130   0.250
GH      0.105   0.660   0.080   7.475   2.550   0.040   0.380   1.050    8.12   0.270   0.190   0.560   0.145   1.190   1.190
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TUNA, YELLOWFIN THUNNUS ALBACARES 091020 AREA- HAWAII SITE- D6 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	1	3.292	0.000	3.292	3.292

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	00
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	00
MEAN	0.040	0.875	6.125	14.973	25.260	0.055	0.060	4.560	27.65	0.180	0.715	0.310	1.090	0.470	0.4
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.040	0.875	6.125	14.973	25.260	0.055	0.060	4.560	27.65	0.180	0.715	0.310	1.090	0.470	0.465

TUNA, YELLOWFIN THUNNUS ALBACARES 091020 AREA- HAWAII SITE- D8 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	1.305	0.000	1.305	1.305
WEIGHT	1	43.546	0.000	43.546	43.546

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PP
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	00
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	00
MEAN	0.145	0.640	0.040	3.820	1.065	0.000	0.213	0.265	4.39	0.215	0.000	0.000	0.230	0.805	0.470
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.145	0.640	0.040	3.820	1.065	0.000	0.213	0.265	4.39	0.215	0.000	0.000	0.230	0.805	0.4

TUNA, YELLOWFIN THUNNUS ALBACARES 091020 AREA- HAWAII SITE- D9 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	1.460	0.000	1.460	1.460
WEIGHT	11	7.706	17.756	1.897	61.236

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000	0008	0009	0000	0000	0000
MEAN	0.065	0.536	0.063	2.686	1.222	0.034	0.197	0.583	3.76	0.185	0.113	0.280	0.090	0.646	0.520
S. D.	0.059	0.202	0.033	1.683	0.336	0.020	0.171	0.451	1.66	0.096	0.119	0.042	0.021	0.307	0.11
LOW	0.020	0.250	0.030	1.312	0.765	0.010	0.060	0.175	2.56	0.080	0.030	0.250	0.060	0.185	0.34
HIGH	0.220	1.000	0.140	7.365	1.915	0.070	0.630	1.460	8.34	0.445	0.250	0.310	0.125	1.310	0.65

TUNA, YELLOWFIN THUNNUS ALBACARES 091020 AREA- HAWAII SITE- D9 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	1.460	0.000	1.460	1.460
WEIGHT	2	31.864	41.538	2.492	61.236

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.120	0.475	3.375	3.505	10.990	0.025	0.280	16.155	177.41	0.285	0.485	0.695	1.095	1.335	0.72
S. D.	0.000	0.318	2.044	2.482	0.000	0.021	0.255	12.933	214.92	0.007	0.064	0.120	0.078	0.148	0.03
LOW	0.000	0.250	1.930	1.750	0.000	0.010	0.100	7.010	25.44	0.280	0.440	0.610	1.040	1.230	0.70
HIGH	0.120	0.700	4.820	5.260	10.990	0.040	0.460	25.300	329.38	0.290	0.530	0.780	1.150	1.440	0.750

TUNA, YELLOWFIN THUNNUS ALBACARES 091020 AREA- HAWAII SITE- H2 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	1	47.627	0.000	47.627	47.627

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.260	0.500	1.690	6.200	0.880	0.080	0.130	17.500	45.62	0.140	0.130	0.500	0.780	0.310	0.220
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.260	0.500	1.690	6.200	0.880	0.080	0.130	17.500	45.62	0.140	0.130	0.500	0.780	0.310	0.220

TUNA, YELLOWFIN THUNNUS ALBACARES 091020 AREA- HAWAII SITE- H5 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	8	10.397	15.097	3.345	47.627

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0007	0007	0000	0000	0000
MEAN	0.115	0.586	0.068	4.069	1.468	0.026	0.128	0.459	3.74	0.220	0.220	0.070	0.090	0.735	0.599
S. D.	0.124	0.219	0.013	1.563	0.431	0.016	0.048	0.168	1.22	0.099	0.000	0.000	0.021	0.232	0.200
LOW	0.040	0.340	0.050	2.650	0.730	0.010	0.060	0.135	2.21	0.110	0.000	0.000	0.045	0.440	0.440
HIGH	0.415	0.940	0.085	6.383	2.125	0.060	0.190	0.680	6.09	0.435	0.220	0.070	0.110	1.190	1.000

TUNA, YELLOWFIN THUNNUS ALBACARES 091020 AREA- HAWAII SITE- H5 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	1	3.600	0.000	3.600	3.600

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.250	5.500	3.100	14.800	0.020	0.130	4.750	24.30	0.210	0.370	0.000	0.810	0.630	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.250	5.500	3.100	14.800	0.020	0.130	4.750	24.30	0.210	0.370	0.000	0.810	0.630	0.630

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                                          TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                               REPORT   MF17
                                          IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                          BY TISSUE AND LOCATION

INA, YELLOWFIN                    THUNNUS ALBACARES                   091020   AREA- HAWAII               SITE- J5   MUSCLE

GTH       NUM   1   MEAN      1.350   S. D.     0.000   LOW      1.350   HIGH      1.350
GHT       NUM   1   MEAN     48.535   S. D.     0.000   LOW     48.535   HIGH     48.535
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM    COPPER     ZINC   NICKEL    MOLYB  VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM

IBER         0001     0001     0001     0000     0000     0001     0001      0001     0001     0001     0001      0001     0001     0001     0001
DET.         0000     0000     0000     0000     0000     0000     0000      0000     0000     0000     0001      0001     0000     0001     0000
N           0.380    0.500    0.150    0.000    0.000    0.040    0.295     0.220     5.92    0.480    0.000     0.000    0.150    0.000    0.750
S. D.       0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.000     0.00    0.000    0.000     0.000    0.000    0.000    0.000
LOW         0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.000     0.00    0.000    0.000     0.000    0.000    0.000    0.000
HIGH        0.380    0.500    0.150    0.000    0.000    0.040    0.295     0.220     5.92    0.480    0.000     0.000    0.150    0.000    0.750

UNA, YELLOWFIN                    THUNNUS ALBACARES                   091020   AREA- HAWAII               SITE- J5   LIVER

LENGTH    NUM   1   MEAN      1.350   S. D.     0.000   LOW      1.350   HIGH      1.350
WEIGHT    NUM   1   MEAN     48.535   S. D.     0.000   LOW     48.535   HIGH     48.535
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM    COPPER     ZINC   NICKEL    MOLYB  VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM

MBER         0001     0001     0001     0001     0001     0001     0001      0001     0001     0001     0001      0001     0001     0001     0000
DET.         0000     0000     0000     0000     0000     0000     0000      0000     0000     0000     0000      0001     0000     0000     0000
MEAN        0.250    0.500    2.930    5.200   19.050    0.060    0.150     6.870    23.75    0.220    0.340     0.000    1.060    1.190    0.000
S. D.       0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.000     0.00    0.000    0.000     0.000    0.000    0.000    0.000
LOW         0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.000     0.00    0.000    0.000     0.000    0.000    0.000    0.000
GH          0.250    0.500    2.930    5.200   19.050    0.060    0.150     6.870    23.75    0.220    0.340     0.000    1.060    1.190    0.000

TUNA, YELLOWFIN                   THUNNUS ALBACARES                   091020   AREA- CALIFORNIA           SITE-      MUSCLE

LENGTH    NUM  20   MEAN      0.915   S. D.     0.278   LOW      0.583   HIGH      1.257
IGHT      NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM    COPPER     ZINC   NICKEL    MOLYB  VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM

NUMBER       0020     0020     0020     0019     0018     0020     0020      0020     0020     0020     0020      0020     0020     0020     0020
N DET.       0000     0000     0000     0000     0000     0001     0001      0000     0000     0000     0013      0011     0000     0000     0000
MEAN        0.324    0.644    0.123    1.883    1.694    0.065    0.198     0.909     6.45    0.250    0.177     0.357    0.155    0.922    0.688
  D.        0.252    0.255    0.081    0.865    1.230    0.033    0.190     0.417     1.35    0.060    0.091     0.155    0.067    0.348    0.168
OW          0.040    0.250    0.055    0.725    0.720    0.030    0.060     0.240     3.93    0.130    0.060     0.090    0.060    0.405    0.425
IGH         0.870    1.065    0.410    3.960    5.343    0.150    0.880     2.065     9.06    0.370    0.310     0.630    0.365    1.660    0.990

TUNA, YELLOWFIN                   THUNNUS ALBACARES                   091020   AREA- CALIFORNIA           SITE-      LIVER

ENGTH     NUM  14   MEAN      1.032   S. D.     0.252   LOW      0.583   HIGH      1.257
EIGHT     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM    COPPER     ZINC   NICKEL    MOLYB  VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM

NUMBER       0014     0014     0014     0013     0010     0014     0014      0014     0014     0014     0014      0014     0014     0014     0013
 DET.        0000     0001     0000     0000     0000     0001     0002      0000     0000     0000     0001      0011     0000     0000     0000
EAN         0.361    0.590   11.060    3.091   19.934    0.096    0.356    14.409    59.70    0.256    0.432     0.343    1.107    0.691    0.563
. D.        0.256    0.226    7.500    2.415    8.648    0.084    0.377     9.993    31.57    0.120    0.155     0.137    0.471    0.390    0.275
OW          0.040    0.310    1.610    1.075    0.510    0.010    0.060     4.700    13.13    0.070    0.160     0.250    0.310    0.060    0.120
HIGH        0.790    1.120   22.810   10.450   31.350    0.310    1.250    43.750   109.37    0.490    0.630     0.500    1.800    1.440    1.130

TUNA, YELLOWFIN                   THUNNUS ALBACARES                   091020   AREA- CALIFORNIA           SITE- R6   MUSCLE

ENGTH     NUM  10   MEAN      0.824   S. D.     0.060   LOW      0.729   HIGH      0.926
EIGHT     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM    COPPER     ZINC   NICKEL    MOLYB  VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM

UMBER        0010     0010     0010     0010     0010     0010     0010      0010     0010     0010     0010      0010     0010     0010     0010
 DET.        0000     0002     0002     0001     0000     0005     0000      0000     0000     0000     0008      0006     0000     0003     0000
EAN         0.133    0.468    0.083    2.903    0.664    0.031    0.199     0.608     6.80    0.208    0.200     0.398    0.168    0.794    0.555
. D.        0.048    0.198    0.043    1.711    0.302    0.012    0.246     0.318     2.73    0.179    0.113     0.095    0.074    0.385    0.192
LOW         0.060    0.180    0.040    1.445    0.430    0.010    0.070     0.130     4.00    0.040    0.120     0.280    0.070    0.190    0.250
HIGH        0.185    0.750    0.145    6.840    1.375    0.040    0.880     1.070    13.19    0.625    0.280     0.500    0.320    1.250    0.810

TUNA, YELLOWFIN                   THUNNUS ALBACARES                   091020   AREA- CALIFORNIA           SITE- R6   LIVER

LENGTH    NUM   3   MEAN      0.851   S. D.     0.031   LOW      0.815   HIGH      0.869
WEIGHT    NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM    COPPER     ZINC   NICKEL    MOLYB  VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM

NUMBER       0003     0003     0003     0003     0003     0003     0003      0003     0003     0003     0003      0003     0003     0003     0002
N DET.       0000     0000     0000     0000     0000     0000     0000      0000     0000     0000     0000      0002     0000     0000     0000
MEAN        0.047    0.467    2.920    2.962    7.850    0.027    0.317     4.870    26.23    0.263    0.373     0.070    1.117    0.650    0.500
S. D.       0.038    0.031    0.234    1.372    4.116    0.006    0.196     2.105     9.18    0.064    0.261     0.000    0.321    0.140    0.354
LOW         0.020    0.440    2.650    1.400    5.350    0.020    0.110     2.560    15.63    0.190    0.150     0.000    0.870    0.550    0.250
HIGH        0.090    0.500    3.070    3.975   12.600    0.030    0.500     6.680    31.80    0.310    0.660     0.070    1.480    0.810    0.750

TUNA, YELLOWFIN                   THUNNUS ALBACARES                   091020   AREA- CALIFORNIA           SITE- W4   MUSCLE

LENGTH    NUM  10   MEAN      0.545   S. D.     0.010   LOW      0.536   HIGH      0.562
WEIGHT    NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM    COPPER     ZINC   NICKEL    MOLYB  VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM       PPM      PPM      PPM      PPM

NUMBER       0010     0010     0010     0010     0010     0010     0010      0010     0010     0010     0010      0010     0010     0010     0009
N DET.       0000     0000     0000     0000     0000     0000     0000      0000     0000     0000     0008      0004     0000     0000     0000
MEAN        0.078    0.988    0.166    1.963    1.381    0.105    0.226     1.252     7.27    0.379    0.130     0.398    0.194    1.333    0.684
S. D.       0.046    0.511    0.037    1.669    0.524    0.045    0.125     0.476     2.53    0.097    0.000     0.324    0.042    0.562    0.168
LOW         0.020    0.440    0.110    0.500    0.520    0.060    0.130     0.440     2.31    0.210    0.130     0.100    0.130    0.505    0.470
HIGH        0.170    2.250    0.225    6.350    2.190    0.190    0.470     2.350    12.59    0.570    0.130     1.000    0.260    2.220    1.000
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

TUNA, BLACKFIN THUNNUS ATLANTICUS 091021 AREA- GULF SITE- L5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 4.994 S. D. 0.000 LOW 4.994 HIGH 4.994

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.330	0.380	0.070	4.000	0.830	0.020	0.190	1.060	5.31	0.170	0.000	0.000	0.110	0.000	0.410
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.330	0.380	0.070	4.000	0.830	0.020	0.190	1.060	5.31	0.170	0.000	0.000	0.110	0.000	0.410

TUNA, BIGEYE THUNNUS OBESUS 091022 AREA- HAWAII SITE- D5 MUSCLE

LENGTH NUM 1 MEAN 1.330 S. D. 0.000 LOW 1.330 HIGH 1.330
WEIGHT NUM 2 MEAN 56.926 S. D. 4.810 LOW 53.524 HIGH 60.327

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0001	0000	0000	0002	0002	0000	0000	0001	0002	0002	0000	0000	0000
MEAN	0.470	0.260	0.060	2.850	1.280	0.000	0.000	0.330	2.89	0.130	0.000	0.000	0.050	0.395	0.490
S. D.	0.113	0.156	0.000	0.000	0.000	0.000	0.000	0.042	0.63	0.000	0.000	0.000	0.028	0.417	0.453
LOW	0.390	0.150	0.000	0.000	0.000	0.000	0.000	0.300	2.44	0.000	0.000	0.000	0.030	0.100	0.170
HIGH	0.550	0.370	0.060	2.850	1.280	0.000	0.000	0.360	3.33	0.130	0.000	0.000	0.070	0.690	0.810

TUNA, BIGEYE THUNNUS OBESUS 091022 AREA- HAWAII SITE- D6 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 6 MEAN 2.970 S. D. 0.430 LOW 2.497 HIGH 3.746

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0002	0000	0000	0000	0004	0005	0000	0000	0000
MEAN	0.061	0.430	0.209	3.524	1.359	0.021	0.201	0.554	3.68	0.176	0.295	0.310	0.101	0.724	0.568
S. D.	0.052	0.281	0.246	1.343	0.176	0.011	0.083	0.348	0.50	0.030	0.148	0.000	0.020	0.279	0.251
LOW	0.020	0.130	0.040	1.725	1.140	0.010	0.130	0.090	2.94	0.130	0.190	0.000	0.075	0.430	0.360
HIGH	0.160	0.930	0.630	4.942	1.650	0.040	0.285	1.170	4.37	0.210	0.400	0.310	0.130	1.190	1.000

TUNA, BIGEYE THUNNUS OBESUS 091022 AREA- HAWAII SITE- D6 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 2.970 S. D. 0.000 LOW 2.970 HIGH 2.970

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.090	0.310	1.760	2.550	28.500	0.050	0.190	2.500	25.00	0.270	0.310	0.000	1.640	0.500	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.090	0.310	1.760	2.550	28.500	0.050	0.190	2.500	25.00	0.270	0.310	0.000	1.640	0.500	0.630

TUNA, BIGEYE THUNNUS OBESUS 091022 AREA- HAWAII SITE- E7 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 2 MEAN 61.943 S. D. 2.207 LOW 60.382 HIGH 63.503

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.410	0.470	0.043	2.935	3.174	0.023	0.205	0.320	3.95	0.170	0.000	0.440	0.125	0.595	0.405
S. D.	0.007	0.219	0.011	1.346	1.780	0.004	0.064	0.311	0.82	0.014	0.000	0.000	0.078	0.177	0.141
LOW	0.405	0.315	0.035	1.983	1.915	0.020	0.160	0.100	3.37	0.160	0.000	0.000	0.070	0.470	0.305
HIGH	0.415	0.625	0.050	3.887	4.433	0.025	0.250	0.540	4.53	0.180	0.000	0.440	0.180	0.720	0.505

TUNA, BIGEYE THUNNUS OBESUS 091022 AREA- HAWAII SITE- E7 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 2 MEAN 58.967 S. D. 6.415 LOW 54.431 HIGH 63.503

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.350	0.625	10.810	11.363	24.750	0.030	0.060	6.220	53.28	0.110	0.470	0.440	0.900	0.405	0.285
S. D.	0.028	0.445	0.453	1.609	0.000	0.000	0.000	0.834	15.25	0.014	0.226	0.000	0.028	0.134	0.035
LOW	0.330	0.310	10.490	10.225	0.000	0.000	0.060	5.630	42.50	0.100	0.310	0.000	0.880	0.310	0.260
HIGH	0.370	0.940	11.130	12.500	24.750	0.030	0.060	6.810	64.06	0.120	0.630	0.440	0.920	0.500	0.310

TUNA, BIGEYE THUNNUS OBESUS 091022 AREA- HAWAII SITE- G5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 45.813 S. D. 0.000 LOW 45.813 HIGH 45.813

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.295	0.500	0.105	0.600	0.475	0.025	0.165	0.050	3.56	0.145	0.060	0.000	0.105	0.565	0.545
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.295	0.500	0.105	0.600	0.475	0.025	0.165	0.050	3.56	0.145	0.060	0.000	0.105	0.565	0.545

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                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                  REPORT   MF17
                                       IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                       BY TISSUE AND LOCATION

   A, BIGEYE                        THUNNUS OBESUS                        091022    AREA- HAWAII               SITE- H2   MUSCLE

   TH         NUM    0    MEAN        0.000    S. D.      0.000    LOW       0.000    HIGH        0.000
   HT         NUM   12    MEAN       56.107    S. D.      8.926    LOW      30.390    HIGH       63.956
            MERCURY    LEAD   CADMIUM  ARSENIC  SELENIUM  SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB  VANADIUM   MANG   ANTIMONY    TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM     PPM      PPM       PPM      PPM      PPM      PPM       PPM

   ER        0011     0012     0012     0012     0012     0012     0012      0012    0012     0012      0012     0012     0012     0012      0012
   T.        0000     0000     0000     0000     0000     0002     0001      0000    0000     0000      0008     0011     0000     0000      0000
            0.351    0.478    0.062    2.783    1.270    0.021    0.222     0.287    3.54    0.142     0.468    0.440    0.076    0.608     0.404
S. D.       0.063    0.183    0.026    1.503    0.391    0.011    0.171     0.220    0.61    0.047     0.326    0.000    0.032    0.258     0.136
LOW         0.265    0.250    0.033    0.750    0.720    0.010    0.060     0.030    2.56    0.080     0.060    0.000    0.045    0.290     0.145
HIGH        0.510    0.940    0.120    6.875    2.305    0.040    0.565     0.870    4.68    0.230     0.810    0.440    0.170    1.130     0.720

 NA, BIGEYE                         THUNNUS OBESUS                        091022    AREA- HAWAII               SITE- H2   LIVER

LENGTH        NUM    0    MEAN        0.000    S. D.      0.000    LOW       0.000    HIGH        0.000
WEIGHT        NUM    7    MEAN       58.923    S. D.      4.030    LOW      53.118    HIGH       63.956
            MERCURY    LEAD   CADMIUM  ARSENIC  SELENIUM  SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB  VANADIUM   MANG   ANTIMONY    TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM     PPM      PPM       PPM      PPM      PPM      PPM       PPM

  BER        0007     0007     0007     0007     0006     0007     0007      0007    0007     0007      0007     0007     0007     0007      0007
   ET.       0000     0000     0000     0000     0000     0000     0001      0000    0000     0000      0000     0004     0000     0000      0000
MEAN        0.421    0.599   10.634    6.042   27.844    0.061    0.144    12.549   39.73    0.192     0.594    0.333    1.020    0.691     0.500
S. D.       0.104    0.283    7.551    2.092    7.520    0.027    0.049     2.901   14.26    0.044     0.228    0.286    0.411    0.328     0.209
LOW         0.315    0.250    2.260    4.000   19.260    0.030    0.060     8.620   23.75    0.130     0.310    0.060    0.440    0.310     0.220
   H        0.630    0.940   25.310    9.887   39.750    0.110    0.190    18.280   60.00    0.250     1.000    0.630    1.640    1.120     0.750

  NA, BIGEYE                        THUNNUS OBESUS                        091022    AREA- HAWAII               SITE- H3   MUSCLE

LENGTH        NUM    0    MEAN        0.000    S. D.      0.000    LOW       0.000    HIGH        0.000
WEIGHT        NUM    1    MEAN       60.327    S. D.      0.000    LOW      60.327    HIGH       60.327
            MERCURY    LEAD   CADMIUM  ARSENIC  SELENIUM  SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB  VANADIUM   MANG   ANTIMONY    TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM     PPM      PPM       PPM      PPM      PPM      PPM       PPM

NUMBER       0001     0001     0001     0001     0000     0001     0001      0001    0001     0001      0001     0001     0001     0001      0001
N DET.       0000     0000     0000     0000     0000     0000     0000      0000    0000     0000      0000     0001     0000     0000      0000
MEAN        0.305    0.345    0.050    1.862    0.000    0.020    0.130     0.285    5.81    0.130     0.190    0.000    0.055    0.340     0.355
  D.        0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.000    0.00    0.000     0.000    0.000    0.000    0.000     0.000
            0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.000    0.00    0.000     0.000    0.000    0.000    0.000     0.000
  H         0.305    0.345    0.050    1.862    0.000    0.020    0.130     0.285    5.81    0.130     0.190    0.000    0.055    0.340     0.355

TUNA, BIGEYE                        THUNNUS OBESUS                        091022    AREA- HAWAII               SITE- H3   LIVER

  NGTH        NUM    0    MEAN        0.000    S. D.      0.000    LOW       0.000    HIGH        0.000
  IGHT        NUM    2    MEAN       57.854    S. D.      3.498    LOW      55.380    HIGH       60.327
            MERCURY    LEAD   CADMIUM  ARSENIC  SELENIUM  SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB  VANADIUM   MANG   ANTIMONY    TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM     PPM      PPM       PPM      PPM      PPM      PPM       PPM

NUMBER       0002     0002     0002     0002     0002     0002     0002      0002    0002     0002      0002     0002     0002     0002      0002
N DET.       0000     0000     0000     0000     0000     0000     0000      0000    0001     0000      0000     0002     0000     0000      0000
  AN        0.278    0.815    4.523    8.986   28.075    0.043    0.165     5.908   66.40    0.188     0.450    0.000    1.023    0.470     0.298
   D.       0.081    0.530    3.016    0.670   17.147    0.025    0.007     1.899    0.00    0.060     0.156    0.000    0.025    0.042     0.110
            0.220    0.440    2.390    8.512   15.950    0.025    0.160     4.565    0.00    0.145     0.340    0.000    1.005    0.440     0.220
  GH        0.335    1.190    6.655    9.460   40.200    0.060    0.170     7.250   66.40    0.230     0.560    0.000    1.040    0.500     0.375

 UNA, BIGEYE                        THUNNUS OBESUS                        091022    AREA- HAWAII               SITE- H6   MUSCLE

  NGTH        NUM    2    MEAN        1.320    S. D.      0.028    LOW       1.300    HIGH        1.340
  IGHT        NUM    3    MEAN       56.245    S. D.      7.426    LOW      49.895    HIGH       64.410
            MERCURY    LEAD   CADMIUM  ARSENIC  SELENIUM  SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB  VANADIUM   MANG   ANTIMONY    TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM     PPM      PPM       PPM      PPM      PPM      PPM       PPM

  MBER       0003     0003     0003     0002     0002     0003     0003      0003    0003     0003      0003     0003     0003     0003      0003
  DET.       0000     0000     0001     0000     0000     0001     0000      0001    0000     0002      0003     0002     0000     0000      0000
  AN        0.495    0.230    0.025    2.658    0.888    0.105    0.087     0.375    3.79    0.130     0.000    0.690    0.045    0.397     0.583
   D.       0.213    0.184    0.021    0.837    0.216    0.106    0.060     0.021    0.27    0.000     0.000    0.000    0.022    0.307     0.057
LOW         0.350    0.100    0.010    2.066    0.735    0.030    0.045     0.360    3.55    0.000     0.000    0.000    0.030    0.190     0.520
HIGH        0.740    0.440    0.040    3.250    1.040    0.180    0.155     0.390    4.08    0.130     0.000    0.690    0.070    0.750     0.630

 UNA, BIGEYE                        THUNNUS OBESUS                        091022    AREA- HAWAII               SITE- H6   LIVER

LENGTH        NUM    2    MEAN        1.320    S. D.      0.028    LOW       1.300    HIGH        1.340
WEIGHT        NUM    2    MEAN       52.163    S. D.      3.207    LOW      49.895    HIGH       54.431
            MERCURY    LEAD   CADMIUM  ARSENIC  SELENIUM  SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB  VANADIUM   MANG   ANTIMONY    TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM     PPM      PPM       PPM      PPM      PPM      PPM       PPM

  MBER       0002     0002     0002     0001     0001     0002     0002      0002    0002     0002      0002     0002     0002     0002      0002
  DET.       0000     0000     0000     0000     0000     0001     0001      0000    0000     0000      0000     0001     0000     0001      0000
MEAN        0.545    0.345    8.485    7.470   34.980    0.180    0.155    10.370   74.82    0.875     0.815    0.120    1.155    0.810     0.475
S. D.       0.332    0.134    9.214    0.000    0.000    0.000    0.000     8.570   25.00    0.530     0.615    0.000    0.389    0.000     0.035
LOW         0.310    0.250    1.970    0.000    0.000    0.000    0.000     4.310   57.14    0.500     0.380    0.000    0.880    0.000     0.450
  GH        0.780    0.440   15.000    7.470   34.980    0.180    0.155    16.430   92.50    1.250     1.250    0.120    1.430    0.810     0.500

 UNA, BIGEYE                        THUNNUS OBESUS                        091022    AREA- HAWAII               SITE- J5   MUSCLE

LENGTH        NUM    7    MEAN        1.285    S. D.      0.138    LOW       1.145    HIGH        1.550
WEIGHT        NUM    7    MEAN       49.571    S. D.     16.813    LOW      34.473    HIGH       83.461
            MERCURY    LEAD   CADMIUM  ARSENIC  SELENIUM  SILVER   CHROM    COPPER   ZINC    NICKEL    MOLYB  VANADIUM   MANG   ANTIMONY    TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM       PPM     PPM      PPM       PPM      PPM      PPM      PPM       PPM

 UMBER       0007     0007     0007     0006     0006     0007     0007      0007    0007     0007      0007     0007     0007     0007      0006
N DET.       0000     0000     0003     0000     0000     0004     0000      0000    0000     0001      0006     0005     0000     0000      0000
MEAN        0.410    0.320    0.085    6.952    1.298    0.140    0.201     0.341    3.77    0.140     0.700    0.450    0.069    0.325     0.352
S. D.       0.072    0.142    0.030    4.526    0.421    0.200    0.124     0.112    0.87    0.116     0.000    0.071    0.036    0.095     0.101
  OW        0.355    0.120    0.050    1.900    0.935    0.010    0.030     0.230    2.49    0.030     0.000    0.400    0.030    0.190     0.220
 IGH        0.560    0.536    0.110   14.250    2.070    0.370    0.400     0.570    5.00    0.330     0.700    0.500    0.130    0.450     0.460
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                                             TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                    REPORT
                                            IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                           BY TISSUE AND LOCATION


 TUNA, BIGEYE                     THUNNUS OBESUS                      091022   AREA- HAWAII                 SITE- J5   LIVER

LENGTH      NUM    2   MEAN        1.334   S. D.       0.023   LOW       1.317   HIGH          1.350
WEIGHT      NUM    2   MEAN       53.751   S. D.       2.887   LOW      51.709   HIGH         55.792
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM       PPM     PPM     PPM     PPM      PPM

NUMBER       0002    0002    0002    0001    0001    0002    0002     0002    0002    0002      0002    0002    0002    0002     000
N DET.       0001    0000    0000    0000    0000    0000    0000     0000    0000    0001      0000    0002    0000    0000     000
MEAN        0.250   0.475  11.170  69.000  13.100   0.095   0.243   11.690   30.43   0.440     0.265   0.000   3.065   0.595    0.57
S. D.       0.000   0.247   3.323   0.000   0.000   0.078   0.018    4.412    7.98   0.000     0.092   0.000   0.700   0.205    0.035
LOW         0.000   0.300   8.820   0.000   0.000   0.040   0.230    8.570   24.78   0.000     0.200   0.000   2.570   0.450    0.550
HIGH        0.250   0.650  13.520  69.000  13.100   0.150   0.255   14.810   36.07   0.440     0.330   0.000   3.560   0.740    0.600


 TUNA, BIGEYE                     THUNNUS OBESUS                      091022   AREA- HAWAII                 SITE- K1   MUSCLE

LENGTH      NUM    0   MEAN        0.000   S. D.       0.000   LOW       0.000   HIGH          0.000
WEIGHT      NUM    6   MEAN       62.596   S. D.       3.430   LOW      58.967   HIGH         67.131
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM       PPM     PPM     PPM     PPM      PPM

NUMBER       0006    0006    0006    0006    0005    0006    0006     0006    0006    0006      0006    0006    0006    0006     000
N DET.       0000    0000    0000    0000    0000    0002    0000     0000    0000    0000      0006    0005    0000    0000     000
MEAN        0.400   0.583   0.055   2.347   1.176   0.025   0.175    0.187    4.39   0.143     0.000   0.060   0.076   0.486    0.428
S. D.       0.074   0.162   0.028   0.984   0.195   0.013   0.073    0.067    0.86   0.036     0.000   0.000   0.023   0.224    0.205
LOW         0.310   0.310   0.010   1.375   0.935   0.010   0.060    0.090    3.35   0.100     0.000   0.000   0.040   0.250    0.22
HIGH        0.485   0.720   0.090   3.562   1.400   0.040   0.255    0.250    5.63   0.190     0.000   0.060   0.105   0.810    0.81


 TUNA, BIGEYE                     THUNNUS OBESUS                      091022   AREA- HAWAII                 SITE- K1   LIVER

LENGTH      NUM    0   MEAN        0.000   S. D.       0.000   LOW       0.000   HIGH          0.000
WEIGHT      NUM    5   MEAN       61.688   S. D.       2.922   LOW      58.966   HIGH         66.677
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM       PPM     PPM     PPM     PPM      PPM

NUMBER       0005    0005    0005    0005    0004    0005    0005     0005    0005    0005      0005    0005    0005    0005     0005
N DET.       0000    0000    0000    0000    0000    0000    0000     0000    0000    0000      0000    0002    0000    0000     0000
MEAN        0.412   0.328   6.209   8.727  28.979   0.071   0.164   11.216   41.87   0.197     0.368   0.393   1.029   0.678    0.458
S. D.       0.151   0.173   3.443   1.849   5.106   0.056   0.085   10.052   27.80   0.059     0.140   0.144   0.253   0.252    0.125
LOW         0.260   0.060   1.843   6.883  24.515   0.010   0.060    4.000   12.50   0.130     0.220   0.310   0.630   0.410    0.250
HIGH        0.580   0.500   9.250  11.330  34.050   0.125   0.250   27.810   87.50   0.290     0.560   0.560   1.310   1.060    0.560


 TUNA, BLUEFIN                    THUNNUS THYNNUS                     091023   AREA- NORTH ATLANTIC         SITE- I7   MUSCLE

LENGTH      NUM    1   MEAN        1.200   S. D.       0.000   LOW       1.200   HIGH          1.200
WEIGHT      NUM    1   MEAN       32.007   S. D.       0.000   LOW      32.007   HIGH         32.007
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM       PPM     PPM     PPM     PPM      PPM

NUMBER       0001    0001    0001    0001    0001    0001    0001     0001    0001    0001      0001    0001    0001    0001     0001
N DET.       0000    0000    0000    0000    0000    0000    0000     0000    0000    0000      0001    0001    0000    0000     0000
MEAN        0.400   0.440   0.090   4.565   0.830   0.020   0.530    0.120    3.69   0.130     0.000   0.000   0.070   0.940    0.560
S. D.       0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000    0.000
LOW         0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000    0.000
HIGH        0.400   0.440   0.090   4.565   0.830   0.020   0.530    0.120    3.69   0.130     0.000   0.000   0.070   0.940    0.560


 TUNA, BLUEFIN                    THUNNUS THYNNUS                     091023   AREA- CALIFORNIA             SITE- K6   MUSCLE

LENGTH      NUM   10   MEAN        0.729   S. D.       0.024   LOW       0.680   HIGH          0.756
WEIGHT      NUM   10   MEAN        8.618   S. D.       1.053   LOW       6.804   HIGH          9.979
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM       PPM     PPM     PPM     PPM      PPM

NUMBER       0010    0010    0010    0010    0010    0010    0010     0010    0009    0010      0010    0010    0010    0010     0010
N DET.       0000    0001    0001    0000    0000    0003    0000     0000    0000    0001      0007    0002    0000    0002     0000
MEAN        0.204   0.523   0.088   2.947   1.609   0.047   0.159    1.032    6.26   0.241     0.290   0.294   0.203   0.994    0.689
S. D.       0.087   0.242   0.034   1.816   1.279   0.029   0.102    0.578    0.97   0.128     0.175   0.219   0.074   0.491    0.253
LOW         0.040   0.230   0.040   0.950   0.600   0.020   0.040    0.460    4.59   0.100     0.120   0.060   0.120   0.400    0.400
HIGH        0.280   0.910   0.140   6.000   5.000   0.110   0.400    2.430    7.69   0.500     0.470   0.750   0.320   1.750    1.150


 TUNA, BLUEFIN                    THUNNUS THYNNUS                     091023   AREA- CALIFORNIA             SITE- K6   LIVER

LENGTH      NUM    1   MEAN        0.729   S. D.       0.000   LOW       0.729   HIGH          0.729
WEIGHT      NUM    1   MEAN        8.618   S. D.       0.000   LOW       8.618   HIGH          8.618
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM       PPM     PPM     PPM     PPM      PPM

NUMBER       0001    0001    0001    0001    0001    0001    0001     0001    0001    0001      0001    0001    0001    0001     0001
N DET.       0000    0001    0000    0000    0000    0000    0000     0000    0000    0000      0000    0001    0000    0001     0000
MEAN        0.130   0.000   2.750   2.925   2.775   0.210   0.195    8.035   21.43   0.180     0.200   0.000   1.785   0.000    0.600
S. D.       0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000    0.000
LOW         0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000    0.000
HIGH        0.130   0.000   2.750   2.925   2.775   0.210   0.195    8.035   21.43   0.180     0.200   0.000   1.785   0.000    0.600


 MOJARRA, YELLOWFIN               GERRES CINEREUS                     094010   AREA- SOUTH ATLANTIC         SITE- J4   MUSCLE

LENGTH      NUM   10   MEAN        0.277   S. D.       0.023   LOW       0.220   HIGH          0.308
WEIGHT      NUM   10   MEAN        0.284   S. D.       0.024   LOW       0.249   HIGH          0.325
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER   ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM     PPM     PPM       PPM     PPM     PPM     PPM      PPM

NUMBER       0010    0010    0010    0010    0010    0010    0010     0010    0010    0010      0010    0010    0010    0010     0010
N DET.       0004    0000    0004    0000    0000    0002    0000     0001    0000    0001      0004    0005    0000    0001     0000
MEAN        0.072   0.615   0.071   2.693   0.491   0.043   0.262    0.221    5.48   0.292     0.407   0.430   0.192   0.786    0.523
S. D.       0.071   0.483   0.019   1.188   0.213   0.015   0.195    0.086    1.52   0.124     0.357   0.428   0.123   0.458    0.138
LOW         0.020   0.245   0.040   0.400   0.125   0.020   0.100    0.070    2.71   0.160     0.060   0.060   0.020   0.250    0.310
HIGH        0.210   1.950   0.095   4.700   0.785   0.075   0.750    0.340    8.21   0.515     0.870   1.130   0.460   1.700    0.750
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 MULLET, STRIPED                 MUGIL CEPHALUS                              098002   AREA- SOUTH ATLANTIC       SITE- C2   MUSCLE

ENGTH      NUM   10   MEAN        0.478   S. D.      0.000   LOW       0.478   HIGH        0.478
EIGHT      NUM   10   MEAN        0.962   S. D.      0.000   LOW       0.962   HIGH        0.962
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM     PPM

NUMBER     0019    0019    0020    0018    0018    0020    0019    0019    0020    0020    0020    0020    0020    0020    0018
 DET.      0015    0000    0001    0000    0000    0003    0000    0000    0000    0000    0018    0016    0000    0003    0000
EAN       0.098   0.567   0.080   1.909   0.272   0.028   0.212   0.514    5.85   0.178   0.250   0.344   0.275   0.686   0.427
. D.      0.040   0.311   0.040   0.921   0.105   0.010   0.183   0.242    1.86   0.072   0.141   0.283   0.174   0.327   0.110
LOW       0.040   0.080   0.035   0.600   0.080   0.010   0.060   0.070    3.00   0.060   0.150   0.160   0.100   0.060   0.300
HIGH      0.130   1.150   0.160   3.750   0.505   0.050   0.800   1.130   10.75   0.320   0.350   0.765   0.710   1.250   0.630

 MULLET, STRIPED                 MUGIL CEPHALUS                              098002   AREA- SOUTH ATLANTIC       SITE- C2   LIVER

ENGTH      NUM   0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
WEIGHT     NUM   0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM     PPM

UMBER      0001    0001    0001    0001    0000    0000    0001    0001    0001    0001    0001    0001    0001    0001    0001
 DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000
EAN       0.030   0.150   0.210   4.400   0.000   0.000   0.100 161.000   41.40   0.320   0.650   0.200   2.140   1.050   1.900
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH      0.030   0.150   0.210   4.400   0.000   0.000   0.100 161.000   41.40   0.320   0.650   0.200   2.140   1.050   1.900

 MULLET, STRIPED                 MUGIL CEPHALUS                              098002   AREA- SOUTH ATLANTIC       SITE- G7   MUSCLE

LENGTH     NUM   10   MEAN        0.306   S. D.      0.000   LOW       0.306   HIGH        0.306
WEIGHT     NUM   10   MEAN        0.397   S. D.      0.000   LOW       0.397   HIGH        0.397
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM     PPM

UMBER      0010    0010    0010    0010    0010    0010    0010    0010    0009    0010    0010    0010    0010    0010    0010
N DET.     0009    0000    0000    0000    0000    0000    0000    0000    0000    0000    0009    0008    0000    0001    0000
MEAN      0.050   0.381   0.060   1.994   0.262   0.036   0.196   0.662    4.35   0.191   0.190   0.395   0.139   0.568   0.546
S. D.     0.000   0.232   0.019   0.918   0.151   0.013   0.205   0.496    1.09   0.082   0.000   0.120   0.035   0.128   0.201
OW        0.000   0.190   0.030   0.840   0.120   0.025   0.020   0.270    2.94   0.060   0.000   0.310   0.090   0.380   0.310
IGH       0.050   1.000   0.100   3.550   0.630   0.070   0.630   1.980    6.62   0.370   0.190   0.480   0.190   0.750   1.000

 MULLET, STRIPED                 MUGIL CEPHALUS                              098002   AREA- SOUTH ATLANTIC       SITE- J1   MUSCLE

LENGTH     NUM   0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
EIGHT      NUM   0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM     PPM

NUMBER     0010    0009    0010    0009    0009    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010
N DET.     0004    0001    0004    0000    0000    0003    0000    0000    0000    0000    0005    0006    0000    0002    0000
MEAN      0.022   0.308   0.063   3.671   0.458   0.037   0.165   0.495    5.43   0.156   0.338   0.418   0.220   0.698   0.493
. D.      0.008   0.120   0.046   1.558   0.404   0.018   0.101   0.165    1.57   0.081   0.270   0.194   0.100   0.222   0.171
OW        0.010   0.190   0.020   0.850   0.180   0.010   0.040   0.200    3.45   0.070   0.060   0.160   0.105   0.400   0.200
IGH       0.030   0.496   0.130   5.466   1.440   0.070   0.380   0.750    8.09   0.280   0.750   0.630   0.360   1.000   0.810

 MULLET, STRIPED                 MUGIL CEPHALUS                              098002   AREA- SOUTH ATLANTIC       SITE- J1   LIVER

ENGTH      NUM   0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
EIGHT      NUM   0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM     PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000
MEAN      0.040   0.190   0.560   3.380   3.300   1.090   0.050  22.500   40.00   0.140   1.560   0.370   0.640   0.370   0.750
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH      0.040   0.190   0.560   3.380   3.300   1.090   0.050  22.500   40.00   0.140   1.560   0.370   0.640   0.370   0.750

 MULLET, STRIPED                 MUGIL CEPHALUS                              098002   AREA- SOUTH ATLANTIC       SITE- J4   MUSCLE

LENGTH     NUM   3    MEAN        0.315   S. D.      0.028   LOW       0.290   HIGH        0.345
WEIGHT     NUM   3    MEAN        0.323   S. D.      0.009   LOW       0.317   HIGH        0.333
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM     PPM

NUMBER     0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004
N DET.     0001    0000    0001    0000    0000    0001    0000    0000    0000    0001    0004    0003    0000    0002    0000
MEAN      0.133   0.698   0.080   2.846   0.603   0.040   0.163   0.313    7.03   0.421   0.000   0.630   0.199   0.630   0.392
S. D.     0.127   0.364   0.053   0.921   0.090   0.010   0.046   0.080    2.64   0.235   0.000   0.000   0.105   0.255   0.044
LOW       0.050   0.335   0.040   1.732   0.470   0.030   0.110   0.210    4.79   0.223   0.000   0.000   0.070   0.450   0.350
HIGH      0.280   1.065   0.140   3.800   0.670   0.050   0.210   0.390   10.71   0.680   0.000   0.630   0.290   0.810   0.450

 MULLET, STRIPED                 MUGIL CEPHALUS                              098002   AREA- SOUTH ATLANTIC       SITE- M1   MUSCLE

LENGTH     NUM   0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
WEIGHT     NUM   0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM     PPM

NUMBER     0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002
N DET.     0001    0000    0001    0000    0000    0001    0000    0000    0000    0000    0001    0001    0000    0002    0000
MEAN      0.050   0.713   0.035   3.188   0.358   0.015   0.288   0.348    4.27   0.133   0.060   0.060   0.128   0.000   0.470
S. D.     0.000   0.477   0.000   0.322   0.117   0.000   0.053   0.138    0.68   0.011   0.000   0.000   0.018   0.000   0.042
LOW       0.000   0.375   0.000   2.960   0.275   0.000   0.250   0.250    3.79   0.125   0.000   0.000   0.115   0.000   0.440
HIGH      0.050   1.050   0.035   3.416   0.440   0.015   0.325   0.445    4.75   0.140   0.060   0.060   0.140   0.000   0.500
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

MULLET, STRIPED MUGIL CEPHALUS 098002 AREA- SOUTH ATLANTIC SITE- M1 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001
MEAN	0.130	0.130	0.380	4.750	0.850	0.090	0.250	4.380	34.38	0.350	1.050	0.530	0.460	0.000	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.130	0.130	0.380	4.750	0.850	0.090	0.250	4.380	34.38	0.350	1.050	0.530	0.460	0.000	0.630

MULLET, STRIPED MUGIL CEPHALUS 098002 AREA- GULF SITE- B8 MUSCLE

LENGTH NUM 1 MEAN 0.250 S. D. 0.000 LOW 0.250 HIGH 0.250
WEIGHT NUM 1 MEAN 0.341 S. D. 0.000 LOW 0.341 HIGH 0.341

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	000
N DET.	0006	0000	0000	0003	0000	0000	0000	0000	0000	0000	0004	0005	0000	0000	000
MEAN	0.010	0.491	0.065	2.127	0.377	0.073	0.231	0.347	6.08	0.311	0.240	0.155	0.572	0.988	0.53
S. D.	0.000	0.242	0.017	0.747	0.118	0.042	0.102	0.138	1.77	0.116	0.206	0.110	0.241	0.470	0.212
LOW	0.000	0.020	0.040	1.163	0.250	0.040	0.060	0.170	2.80	0.110	0.060	0.060	0.260	0.300	0.050
HIGH	0.010	0.880	0.080	3.400	0.600	0.160	0.420	0.610	9.13	0.500	0.570	0.250	0.940	2.060	0.750

MULLET, STRIPED MUGIL CEPHALUS 098002 AREA- GULF SITE- D5 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0009	0010	0010	0010	0010	0010	0010
N DET.	0010	0000	0000	0000	0000	0002	0000	0000	0000	0000	0010	0009	0000	0000	0000
MEAN	0.000	0.401	0.067	2.629	0.498	0.028	0.174	0.486	5.48	0.197	0.000	0.480	0.448	0.699	0.467
S. D.	0.000	0.225	0.021	1.343	0.169	0.023	0.081	0.288	0.74	0.069	0.000	0.000	0.195	0.187	0.110
LOW	0.000	0.190	0.040	0.590	0.260	0.010	0.060	0.160	4.56	0.130	0.000	0.000	0.210	0.380	0.310
HIGH	0.000	0.810	0.110	5.000	0.700	0.080	0.310	0.890	6.69	0.340	0.000	0.480	0.780	0.940	0.640

MULLET, STRIPED MUGIL CEPHALUS 098002 AREA- GULF SITE- E5 MUSCLE

LENGTH NUM 20 MEAN 0.376 S. D. 0.020 LOW 0.344 HIGH 0.420
WEIGHT NUM 20 MEAN 0.530 S. D. 0.101 LOW 0.394 HIGH 0.701

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0019
N DET.	0011	0001	0002	0000	0001	0005	0001	0000	0000	0003	0019	0015	0000	0002	0000
MEAN	0.043	0.522	0.105	3.288	0.378	0.043	0.173	0.390	5.07	0.208	0.440	0.323	0.266	0.836	0.652
S. D.	0.029	0.244	0.102	1.251	0.173	0.021	0.082	0.111	0.53	0.064	0.000	0.105	0.168	0.270	0.258
LOW	0.010	0.010	0.040	1.625	0.050	0.010	0.060	0.170	3.93	0.100	0.000	0.250	0.070	0.500	0.360
HIGH	0.100	1.030	0.480	5.900	0.690	0.110	0.340	0.610	5.93	0.340	0.440	0.500	0.870	1.600	1.450

MULLET, STRIPED MUGIL CEPHALUS 098002 AREA- GULF SITE- E5 LIVER

LENGTH NUM 2 MEAN 0.382 S. D. 0.004 LOW 0.379 HIGH 0.385
WEIGHT NUM 2 MEAN 0.590 S. D. 0.008 LOW 0.584 HIGH 0.595

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.078	0.768	0.303	17.613	3.158	0.225	0.110	87.513	73.27	0.320	1.845	1.448	0.440	0.720	0.420
S. D.	0.060	0.110	0.046	15.609	0.668	0.120	0.071	4.402	6.83	0.198	0.000	0.095	0.240	0.396	0.071
LOW	0.035	0.690	0.270	6.575	2.685	0.140	0.060	84.400	68.44	0.180	0.000	1.380	0.270	0.440	0.370
HIGH	0.120	0.845	0.335	28.650	3.630	0.310	0.160	90.625	78.10	0.460	1.845	1.515	0.610	1.000	0.470

MULLET, STRIPED MUGIL CEPHALUS 098002 AREA- GULF SITE- G3 MUSCLE

LENGTH NUM 2 MEAN 0.250 S. D. 0.000 LOW 0.250 HIGH 0.250
WEIGHT NUM 2 MEAN 0.341 S. D. 0.000 LOW 0.341 HIGH 0.341

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0001
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.000	0.350	0.060	3.205	0.373	0.085	0.160	0.305	5.04	0.273	0.000	0.090	0.193	0.970	0.490
S. D.	0.000	0.127	0.014	1.747	0.046	0.064	0.014	0.106	1.07	0.053	0.000	0.000	0.004	0.141	0.000
LOW	0.000	0.260	0.050	1.970	0.340	0.040	0.150	0.230	4.28	0.235	0.000	0.000	0.190	0.870	0.000
HIGH	0.000	0.440	0.070	4.440	0.405	0.130	0.170	0.380	5.80	0.310	0.000	0.090	0.195	1.070	0.490

MULLET, STRIPED MUGIL CEPHALUS 098002 AREA- GULF SITE- G5 MUSCLE

LENGTH NUM 3 MEAN 0.418 S. D. 0.127 LOW 0.273 HIGH 0.510
WEIGHT NUM 3 MEAN 1.092 S. D. 0.701 LOW 0.326 HIGH 1.702

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0002	0000
MEAN	0.020	0.448	0.095	1.133	0.605	0.033	0.170	0.537	4.02	0.282	0.000	0.310	0.202	0.940	0.470
S. D.	0.000	0.143	0.039	0.651	0.118	0.006	0.035	0.148	1.32	0.068	0.000	0.000	0.050	0.000	0.078
LOW	0.020	0.310	0.070	0.500	0.470	0.030	0.130	0.375	2.97	0.235	0.000	0.000	0.150	0.000	0.380
HIGH	0.020	0.595	0.140	1.800	0.690	0.040	0.190	0.665	5.50	0.360	0.000	0.310	0.250	0.940	0.515

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

MULLET, STRIPED   MUGIL CEPHALUS   098002   AREA- GULF   SITE- L2   MUSCLE

ENGTH NUM 1 MEAN 0.372 S. D. 0.000 LOW 0.372 HIGH 0.372
EIGHT NUM 1 MEAN 0.419 S. D. 0.000 LOW 0.419 HIGH 0.419

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
DET.	0001	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
IEAN	0.000	1.000	0.060	0.000	0.270	0.030	0.130	0.220	5.31	0.180	0.060	0.000	0.130	1.060	0.510
. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	1.000	0.060	0.000	0.270	0.030	0.130	0.220	5.31	0.180	0.060	0.000	0.130	1.060	0.510

MULLET, STRIPED   MUGIL CEPHALUS   098002   AREA- GULF   SITE- L5   MUSCLE

ENGTH NUM 12 MEAN 0.319 S. D. 0.013 LOW 0.298 HIGH 0.348
WEIGHT NUM 12 MEAN 0.642 S. D. 0.071 LOW 0.554 HIGH 0.807

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0011	0011	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012
N DET.	0010	0001	0005	0000	0001	0004	0000	0000	0000	0006	0008	0009	0000	0004	0000
EAN	0.060	0.487	0.064	3.532	0.376	0.052	0.200	0.313	5.62	0.270	0.218	0.395	0.129	0.816	0.483
S. D.	0.000	0.229	0.025	1.877	0.109	0.039	0.117	0.119	1.05	0.102	0.153	0.257	0.066	0.431	0.172
LOW	0.060	0.200	0.035	0.750	0.200	0.020	0.030	0.170	3.87	0.180	0.090	0.120	0.040	0.250	0.320
HIGH	0.060	0.825	0.110	6.750	0.520	0.140	0.450	0.560	7.76	0.450	0.440	0.630	0.250	1.440	0.940

MULLET, STRIPED   MUGIL CEPHALUS   098002   AREA- GULF   SITE- L9   MUSCLE

LENGTH NUM 2 MEAN 0.328 S. D. 0.006 LOW 0.324 HIGH 0.332
WEIGHT NUM 2 MEAN 0.323 S. D. 0.001 LOW 0.322 HIGH 0.324

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0015	0014	0014
N DET.	0014	0001	0002	0000	0003	0002	0000	0000	0000	0001	0014	0014	0000	0001	0000
MEAN	0.040	0.464	0.058	2.899	0.246	0.027	0.203	0.343	4.73	0.163	0.030	0.190	0.172	0.535	0.547
S. D.	0.000	0.272	0.021	1.291	0.184	0.009	0.173	0.149	1.19	0.068	0.000	0.000	0.053	0.343	0.291
LOW	0.000	0.130	0.020	0.450	0.050	0.010	0.010	0.160	1.38	0.060	0.000	0.000	0.120	0.250	0.310
HIGH	0.040	1.130	0.090	4.500	0.630	0.040	0.630	0.750	6.79	0.350	0.030	0.190	0.320	1.630	1.250

MULLET, STRIPED   MUGIL CEPHALUS   098002   AREA- HAWAII   SITE- D5   MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 18 MEAN 0.469 S. D. 0.105 LOW 0.312 HIGH 0.709

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0018	0018	0018	0018	0018	0018	0017	0018	0018	0018	0018	0018	0018	0018	0018
N DET.	0016	0000	0000	0000	0000	0001	0001	0000	0000	0000	0014	0014	0000	0001	0000
MEAN	0.090	0.368	0.056	2.449	0.372	0.036	0.187	0.462	4.59	0.191	0.325	0.348	0.232	0.586	0.562
S. D.	0.071	0.145	0.015	1.629	0.185	0.014	0.133	0.203	1.37	0.071	0.255	0.243	0.124	0.223	0.171
LOW	0.040	0.130	0.020	0.590	0.150	0.020	0.030	0.060	2.25	0.080	0.130	0.100	0.110	0.130	0.310
HIGH	0.140	0.690	0.080	7.450	0.915	0.070	0.440	0.880	7.56	0.390	0.700	0.620	0.580	1.000	0.940

MULLET, STRIPED   MUGIL CEPHALUS   098002   AREA- HAWAII   SITE- D6   MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 9 MEAN 0.520 S. D. 0.150 LOW 0.432 HIGH 0.899

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0008	0008	0009	0008	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0006	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0003	0000	0001	0000
MEAN	0.047	0.306	0.061	2.541	0.441	0.032	0.132	0.324	4.09	0.198	0.147	0.248	0.172	0.527	0.541
S. D.	0.046	0.163	0.017	1.127	0.217	0.014	0.043	0.120	0.74	0.041	0.086	0.208	0.052	0.264	0.161
LOW	0.020	0.060	0.035	1.500	0.140	0.010	0.045	0.140	2.90	0.135	0.060	0.060	0.070	0.190	0.220
HIGH	0.100	0.535	0.085	5.091	0.723	0.055	0.190	0.500	5.06	0.245	0.310	0.620	0.230	1.060	0.690

MULLET, STRIPED   MUGIL CEPHALUS   098002   AREA- HAWAII   SITE- H1   MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 13 MEAN 0.607 S. D. 0.185 LOW 0.437 HIGH 0.951

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0012	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0012	0013
N DET.	0012	0000	0000	0000	0000	0000	0000	0000	0000	0000	0011	0011	0000	0006	0000
MEAN	0.020	0.422	0.073	1.598	0.327	0.032	0.185	0.279	4.58	0.229	0.205	0.220	0.234	0.558	0.497
S. D.	0.000	0.258	0.031	0.980	0.148	0.006	0.127	0.157	1.12	0.066	0.064	0.042	0.059	0.275	0.173
LOW	0.000	0.185	0.040	0.500	0.010	0.020	0.060	0.060	3.00	0.160	0.160	0.190	0.150	0.060	0.310
HIGH	0.020	1.000	0.160	3.800	0.515	0.040	0.500	0.570	6.19	0.380	0.250	0.250	0.330	0.850	[illegible].910

MULLET, SILVER (WHITE)   MUGIL CUREMA   098003   AREA- SOUTH ATLANTIC   SITE- J4   MUSCLE

LENGTH NUM 2 MEAN 0.279 S. D. 0.009 LOW 0.272 HIGH 0.285
WEIGHT NUM 2 MEAN 0.313 S. D. 0.006 LOW 0.308 HIGH 0.317

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.040	0.595	0.060	4.200	0.670	0.065	0.140	0.495	8.25	0.245	0.060	0.560	0.135	0.785	0.505
S. D.	0.028	0.219	0.000	3.606	0.438	0.035	0.071	0.191	3.35	0.021	0.000	0.000	0.021	0.219	0.177
LOW	0.020	0.440	0.060	1.650	0.360	0.040	0.090	0.360	5.88	0.230	0.000	0.000	0.120	0.630	0.380
HIGH	0.060	0.750	0.060	6.750	0.980	0.090	0.190	0.630	10.62	0.260	0.060	0.560	0.150	0.940	0.630

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                                 TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                      REPORT    MF
                                 IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                 BY TISSUE AND LOCATION


MULLET, SILVER (WHITE)        MUGIL CUREMA                                  098003   AREA- SOUTH ATLANTIC       SITE- M1   MUSCLE

LENGTH    NUM   1  MEAN       0.251    S. D.     0.000   LOW      0.251   HIGH       0.251
WEIGHT    NUM   0  MEAN       0.000    S. D.     0.000   LOW      0.000   HIGH       0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0024    0024    0024    0023    0024    0024    0022    0024    0023    0024      0024    0024    0024    0024    0023
N DET.     0018    0000    0000    0000    0000    0002    0002    0000    0000    0000      0024    0014    0000    0000    0000
MEAN      0.035   0.486   0.065   2.600   0.326   0.025   0.271   0.428    7.32   0.184     0.000   0.269   0.154   0.717   0.542
S. D.     0.018   0.214   0.019   1.299   0.265   0.010   0.225   0.174    1.20   0.050     0.000   0.124   0.068   0.253   0.105
LOW       0.020   0.130   0.030   0.100   0.020   0.010   0.060   0.020    4.81   0.080     0.000   0.090   0.080   0.380   0.380
HIGH      0.060   0.940   0.110   6.710   1.130   0.050   0.880   0.760   10.17   0.260     0.000   0.470   0.375   1.630   0.780


MULLET, SILVER (WHITE)        MUGIL CUREMA                                  098003   AREA- GULF                 SITE- R6   MUSCLE

LENGTH    NUM   0  MEAN       0.000    S. D.     0.000   LOW      0.000   HIGH       0.000
WEIGHT    NUM   0  MEAN       0.000    S. D.     0.000   LOW      0.000   HIGH       0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0010    0010    0010    0010    0010    0010    0009    0010    0010    0010      0010    0010    0010    0010    0010
N DET.     0010    0000    0000    0000    0000    0000    0001    0000    0000    0000      0009    0008    0000    0000    0000
MEAN      0.000   0.435   0.064   2.747   0.288   0.033   0.146   0.582    7.66   0.203     0.250   0.380   0.159   0.602   0.442
S. D.     0.000   0.216   0.012   1.120   0.091   0.010   0.093   0.194    1.33   0.055     0.000   0.141   0.023   0.219   0.069
LOW       0.000   0.190   0.050   1.300   0.100   0.015   0.040   0.350    4.09   0.135     0.000   0.280   0.135   0.310   0.310
HIGH      0.000   0.810   0.090   5.000   0.440   0.050   0.310   1.060    8.63   0.310     0.250   0.480   0.210   0.940   0.560


SHEEPSHEAD                    ARCHOSARGUS PROBATOCEPHALUS                   114001   AREA- GULF                 SITE- B8   MUSCLE

LENGTH    NUM   5  MEAN       0.423    S. D.     0.067   LOW      0.343   HIGH       0.520
WEIGHT    NUM   5  MEAN       1.637    S. D.     0.665   LOW      0.752   HIGH       2.495
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0007    0007    0007    0006    0006    0007    0007    0007    0007    0007      0007    0007    0007    0007    0007
N DET.     0000    0000    0000    0000    0000    0001    0000    0000    0000    0001      0005    0005    0000    0002    0000
MEAN      0.161   0.430   0.096   4.589   0.753   0.051   0.163   0.278    3.59   0.267     0.205   0.330   0.166   0.644   0.441
S. D.     0.173   0.301   0.051   1.915   0.310   0.056   0.061   0.112    0.69   0.160     0.205   0.382   0.113   0.180   0.200
LOW       0.040   0.040   0.050   2.650   0.360   0.010   0.080   0.105    2.20   0.120     0.060   0.060   0.010   0.500   0.050
HIGH      0.520   0.940   0.185   7.150   1.215   0.160   0.245   0.440    4.28   0.530     0.350   0.600   0.325   0.940   0.650


SHEEPSHEAD                    ARCHOSARGUS PROBATOCEPHALUS                   114001   AREA- GULF                 SITE- D5   MUSCLE

LENGTH    NUM   0  MEAN       0.000    S. D.     0.000   LOW      0.000   HIGH       0.000
WEIGHT    NUM   0  MEAN       0.000    S. D.     0.000   LOW      0.000   HIGH       0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0010    0008    0010    0010    0010    0010    0009    0010    0010    0009      0010    0010    0010    0010    0010
N DET.     0002    0000    0000    0000    0000    0000    0000    0000    0000    0000      0010    0007    0000    0000    0000
MEAN      0.046   0.427   0.080   3.196   0.628   0.028   0.231   0.322    3.71   0.174     0.000   0.283   0.256   0.746   0.568
S. D.     0.026   0.134   0.035   1.915   0.122   0.010   0.234   0.135    0.78   0.048     0.000   0.095   0.180   0.181   0.074
LOW       0.020   0.250   0.060   0.990   0.500   0.010   0.060   0.240    2.05   0.100     0.000   0.190   0.120   0.500   0.380
HIGH      0.100   0.690   0.150   7.750   0.850   0.040   0.810   0.690    5.00   0.250     0.000   0.380   0.690   1.060   0.630


SHEEPSHEAD                    ARCHOSARGUS PROBATOCEPHALUS                   114001   AREA- GULF                 SITE- E5   MUSCLE

LENGTH    NUM  10  MEAN       0.363    S. D.     0.052   LOW      0.290   HIGH       0.448
WEIGHT    NUM  10  MEAN       0.902    S. D.     0.295   LOW      0.494   HIGH       1.417
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0010    0009    0010    0010    0010    0010    0010    0010    0010    0010      0010    0009    0010    0010    0009
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000      0010    0009    0000    0002    0000
MEAN      0.143   0.505   0.097   3.543   0.708   0.033   0.291   0.321    3.71   0.212     0.000   0.000   0.167   0.732   0.574
S. D.     0.067   0.231   0.067   1.260   0.244   0.013   0.167   0.118    0.77   0.063     0.000   0.000   0.039   0.362   0.221
LOW       0.050   0.190   0.050   2.000   0.160   0.010   0.060   0.070    1.81   0.110     0.000   0.000   0.090   0.125   0.220
HIGH      0.230   0.880   0.280   5.750   1.040   0.060   0.690   0.480    4.44   0.290     0.000   0.000   0.220   1.250   1.060


SHEEPSHEAD                    ARCHOSARGUS PROBATOCEPHALUS                   114001   AREA- GULF                 SITE- E5   LIVER

LENGTH    NUM   1  MEAN       0.352    S. D.     0.000   LOW      0.352   HIGH       0.352
WEIGHT    NUM   1  MEAN       0.835    S. D.     0.000   LOW      0.835   HIGH       0.835
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001      0001    0001    0001    0001    0001
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000      0000    0000    0000    0000    0000
MEAN      0.240   0.810   0.400  10.650   0.400   0.090   0.190  19.130   71.88   0.490     0.410   0.630   2.310   1.310   0.750
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000     0.000   0.000   0.000   0.000   0.000
HIGH      0.240   0.810   0.400  10.650   0.400   0.090   0.190  19.130   71.88   0.490     0.410   0.630   2.310   1.310   0.750


SHEEPSHEAD                    ARCHOSARGUS PROBATOCEPHALUS                   114001   AREA- GULF                 SITE- F7   MUSCLE

LENGTH    NUM   0  MEAN       0.000    S. D.     0.000   LOW      0.000   HIGH       0.000
WEIGHT    NUM   0  MEAN       0.000    S. D.     0.000   LOW      0.000   HIGH       0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0009    0010    0010    0010    0010    0010    0009    0010    0010    0010      0010    0010    0010    0010    0010
N DET.     0000    0000    0002    0000    0000    0002    0001    0000    0000    0000      0004    0008    0000    0001    0000
MEAN      0.167   0.475   0.056   2.872   0.343   0.042   0.208   0.223    3.75   0.246     0.238   0.413   0.126   1.018   0.648
S. D.     0.059   0.192   0.019   1.946   0.191   0.019   0.168   0.102    1.40   0.144     0.250   0.145   0.048   0.413   0.218
LOW       0.090   0.303   0.030   0.900   0.130   0.010   0.080   0.040    1.75   0.070     0.030   0.310   0.070   0.620   0.360
HIGH      0.240   0.940   0.090   7.000   0.800   0.070   0.510   0.375    6.80   0.570     0.720   0.515   0.217   2.000   0.940
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                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   MF17
                                        IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                        BY TISSUE AND LOCATION

 SHEEPSHEAD                      ARCHOSARGUS PROBATOCEPHALUS       114001   AREA- GULF                  SITE- F7   LIVER

LENGTH    NUM   0   MEAN      0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
WEIGHT    NUM   0   MEAN      0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000
MEAN          0.415    0.470    0.490    6.316    1.850    0.150    0.130   41.565   406.25    0.535    0.155    0.310    1.605    0.380    0.625
S. D.         0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
LOW           0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
HIGH          0.415    0.470    0.490    6.316    1.850    0.150    0.130   41.565   406.25    0.535    0.155    0.310    1.605    0.380    0.625

 SHEEPSHEAD                      ARCHOSARGUS PROBATOCEPHALUS       114001   AREA- GULF                  SITE- G5   MUSCLE

LENGTH    NUM  13   MEAN      0.397   S. D.      0.096   LOW      0.250   HIGH       0.580
WEIGHT    NUM  13   MEAN      1.379   S. D.      1.026   LOW      0.340   HIGH       3.405
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0013     0011     0013     0013     0013     0013     0013     0013     0013     0013     0013     0013     0013     0013     0012
N DET.         0000     0000     0000     0000     0000     0000     0001     0000     0000     0000     0013     0011     0000     0013     0000
MEAN          0.115    0.493    0.063    3.124    0.697    0.034    0.283    0.325     3.63    0.262    0.000    0.205    0.194    0.000    0.605
S. D.         0.174    0.183    0.009    1.728    0.350    0.009    0.340    0.084     0.49    0.057    0.000    0.064    0.090    0.000    0.122
LOW           0.020    0.280    0.050    0.900    0.160    0.020    0.060    0.210     2.90    0.155    0.000    0.160    0.080    0.000    0.440
HIGH          0.625    0.875    0.080    6.475    1.540    0.050    1.285    0.460     4.84    0.360    0.000    0.250    0.390    0.000    0.840

 SHEEPSHEAD                      ARCHOSARGUS PROBATOCEPHALUS       114001   AREA- GULF                  SITE- L5   MUSCLE

LENGTH    NUM  10   MEAN      0.231   S. D.      0.051   LOW      0.188   HIGH       0.347
WEIGHT    NUM  10   MEAN      0.598   S. D.      0.317   LOW      0.355   HIGH       1.351
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0010     0010     0010     0010     0010     0010     0010     0010     0009     0010     0010     0010     0010     0010     0010
N DET.         0001     0000     0003     0000     0000     0004     0000     0000     0000     0002     0007     0006     0000     0003     0000
MEAN          0.152    0.575    0.112    7.658    0.715    0.048    0.231    0.316     4.60    0.330    0.593    0.318    0.204    0.963    0.596
S. D.         0.041    0.309    0.057    2.983    0.271    0.026    0.217    0.067     1.52    0.254    0.622    0.123    0.150    0.556    0.205
LOW           0.085    0.190    0.040    3.500    0.300    0.010    0.070    0.210     2.21    0.090    0.190    0.230    0.040    0.100    0.350
HIGH          0.210    1.200    0.210   11.500    1.220    0.070    0.800    0.450     7.30    0.780    1.310    0.500    0.570    1.780    1.000

 PINFISH, SPOTTAIL               DIPLODUS HOLBROOKI                114013   AREA- SOUTH ATLANTIC        SITE- J4   MUSCLE

LENGTH    NUM   6   MEAN      0.228   S. D.      0.024   LOW      0.210   HIGH       0.276
WEIGHT    NUM  10   MEAN      0.352   S. D.      0.080   LOW      0.202   HIGH       0.454
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0010     0010     0010     0010     0010     0010     0010     0010     0009     0009     0010     0010     0009     0010     0010
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0006     0002     0000     0003     0000
MEAN          0.205    0.644    0.087    5.300    0.712    0.054    0.173    0.445     5.25    0.242    0.563    0.259    0.192    0.680    0.618
S. D.         0.104    0.276    0.046    2.368    0.341    0.033    0.092    0.474     1.31    0.071    0.445    0.155    0.079    0.427    0.244
LOW           0.030    0.287    0.040    2.250    0.290    0.030    0.075    0.140     3.44    0.150    0.160    0.060    0.095    0.130    0.225
HIGH          0.340    1.150    0.210    8.200    1.400    0.140    0.365    1.693     7.58    0.395    1.120    0.500    0.380    1.125    0.950

 PINFISH, SPOTTAIL               DIPLODUS HOLBROOKI                114013   AREA- SOUTH ATLANTIC        SITE- J4   LIVER

LENGTH    NUM   1   MEAN      0.218   S. D.      0.000   LOW      0.218   HIGH       0.218
WEIGHT    NUM   1   MEAN      0.336   S. D.      0.000   LOW      0.336   HIGH       0.336
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0001     0001     0001     0001     0000     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000
MEAN          0.120    0.750    1.620    3.050    0.000    0.060    0.210    3.370    48.75    0.310    0.440    0.440    0.970    0.900    0.560
S. D.         0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
LOW           0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
HIGH          0.120    0.750    1.620    3.050    0.000    0.060    0.210    3.370    48.75    0.310    0.440    0.440    0.970    0.900    0.560

 PORGY, RED                      PAGRUS SEDECIM                    114014   AREA- SOUTH ATLANTIC        SITE- B5   MUSCLE

LENGTH    NUM   0   MEAN      0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
WEIGHT    NUM   0   MEAN      0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010
N DET.         0000     0000     0000     0000     0000     0001     0000     0000     0000     0000     0007     0009     0000     0001     0000
MEAN          0.494    0.590    0.088   19.105    0.591    0.043    0.211    0.253     3.35    0.267    0.158    0.455    0.089    0.837    0.635
S. D.         0.096    0.218    0.028   13.135    0.153    0.026    0.114    0.085     0.68    0.077    0.085    0.000    0.029    0.386    0.137
LOW           0.340    0.316    0.040    6.370    0.405    0.020    0.040    0.140     2.81    0.130    0.060    0.000    0.040    0.480    0.440
HIGH          0.630    1.000    0.140   45.000    0.860    0.110    0.380    0.370     4.75    0.370    0.215    0.455    0.140    1.500    0.880

 PORGY, RED                      PAGRUS SEDECIM                    114014   AREA- SOUTH ATLANTIC        SITE- B5   LIVER

LENGTH    NUM   0   MEAN      0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
WEIGHT    NUM   0   MEAN      0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0001     0000
MEAN          0.450    0.630    7.190    8.350    2.750    0.060    0.310    6.750    35.94    0.420    0.410    5.440    1.440    0.000    0.940
S. D.         0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
LOW           0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
HIGH          0.450    0.630    7.190    8.350    2.750    0.060    0.310    6.750    35.94    0.420    0.410    5.440    1.440    0.000    0.940
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

PORGY, RED   PAGRUS SEDECIM   114014   AREA- SOUTH ATLANTIC   SITE- C2   MUSCLE

LENGTH	NUM	10	MEAN	0.365	S. D.	0.000	LOW	0.365	HIGH	0.365
WEIGHT	NUM	10	MEAN	1.022	S. D.	0.000	LOW	1.022	HIGH	1.022

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0006	0007	0000	0000	0000
MEAN	0.612	0.598	0.065	15.119	0.626	0.047	0.230	0.321	3.96	0.249	0.196	0.063	0.120	0.975	0.684
S. D.	0.252	0.146	0.020	6.741	0.180	0.026	0.097	0.107	1.24	0.060	0.053	0.025	0.031	0.191	0.168
LOW	0.340	0.375	0.040	4.700	0.300	0.015	0.120	0.190	2.44	0.150	0.125	0.040	0.060	0.630	0.440
HIGH	1.166	0.880	0.115	30.500	0.850	0.110	0.375	0.495	7.12	0.350	0.250	0.090	0.170	1.310	0.970

PORGY, RED   PAGRUS SEDECIM   114014   AREA- SOUTH ATLANTIC   SITE- G2   MUSCLE

LENGTH	NUM	2	MEAN	0.241	S. D.	0.053	LOW	0.203	HIGH	0.278
WEIGHT	NUM	2	MEAN	0.312	S. D.	0.192	LOW	0.176	HIGH	0.448

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0001	0000	0000	0002	0001	0000	0000	0001	0002	0001	0000	0000	0000
MEAN	0.215	0.325	0.140	12.495	0.505	0.000	0.223	0.220	2.59	0.465	0.000	0.350	0.180	1.410	0.400
S. D.	0.134	0.035	0.000	2.906	0.134	0.000	0.000	0.014	0.13	0.000	0.000	0.000	0.099	1.358	0.141
LOW	0.120	0.300	0.000	10.440	0.410	0.000	0.000	0.210	2.50	0.000	0.000	0.000	0.110	0.450	0.300
HIGH	0.310	0.350	0.140	14.550	0.600	0.000	0.223	0.230	2.68	0.465	0.000	0.350	0.250	2.370	0.500

SCUP   STENOTOMUS CHRYSOPS   114016   AREA- NORTH ATLANTIC   SITE- I8   MUSCLE

LENGTH	NUM	1	MEAN	0.171	S. D.	0.000	LOW	0.171	HIGH	0.171
WEIGHT	NUM	11	MEAN	0.023	S. D.	0.034	LOW	0.011	HIGH	0.127

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0010	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0004	0000
MEAN	0.020	1.118	0.146	1.679	0.912	0.124	0.366	0.879	11.01	0.564	0.356	0.536	0.891	1.733	1.551
S. D.	0.000	0.515	0.041	1.053	0.306	0.037	0.146	0.227	3.23	0.174	0.142	0.203	0.324	0.391	0.548
LOW	0.000	0.190	0.070	0.580	0.420	0.030	0.130	0.240	3.25	0.210	0.250	0.310	0.150	1.220	0.470
HIGH	0.020	2.300	0.240	3.790	1.230	0.180	0.700	1.100	15.00	0.850	0.720	1.000	1.235	2.310	2.470

SCUP   STENOTOMUS CHRYSOPS   114016   AREA- NORTH ATLANTIC   SITE- J6   MUSCLE

LENGTH	NUM	3	MEAN	0.200	S. D.	0.027	LOW	0.176	HIGH	0.230
WEIGHT	NUM	3	MEAN	0.208	S. D.	0.068	LOW	0.156	HIGH	0.285

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0002
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0003	0002	0000	0002	0000
MEAN	0.113	0.560	0.137	1.244	0.303	0.033	0.145	0.343	2.25	0.320	0.000	0.220	0.193	0.630	0.485
S. D.	0.047	0.354	0.059	0.991	0.300	0.006	0.021	0.263	0.97	0.200	0.000	0.000	0.091	0.000	0.064
LOW	0.060	0.310	0.070	0.580	0.120	0.030	0.130	0.060	1.13	0.190	0.000	0.000	0.090	0.000	0.440
HIGH	0.150	0.810	0.180	2.383	0.650	0.040	0.160	0.580	2.81	0.550	0.000	0.220	0.260	0.630	0.530

SCUP   STENOTOMUS CHRYSOPS   114016   AREA- NORTH ATLANTIC   SITE- J7   MUSCLE

LENGTH	NUM	6	MEAN	0.193	S. D.	0.005	LOW	0.188	HIGH	0.202
WEIGHT	NUM	6	MEAN	0.168	S. D.	0.018	LOW	0.149	HIGH	0.191

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0005	0006	0006	0006	0006	0006	0006	0006
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0005	0000	0003	0000
MEAN	0.086	0.594	0.084	3.076	0.513	0.043	0.161	0.430	3.38	0.257	0.130	0.250	0.239	0.948	0.694
S. D.	0.066	0.452	0.031	2.774	0.310	0.015	0.052	0.246	1.44	0.089	0.000	0.000	0.097	0.386	0.173
LOW	0.020	0.130	0.050	0.580	0.050	0.020	0.100	0.190	0.81	0.080	0.000	0.000	0.125	0.635	0.530
HIGH	0.150	1.250	0.140	7.500	0.850	0.060	0.220	0.815	5.25	0.320	0.130	0.250	0.390	1.380	1.000

SCUP   STENOTOMUS CHRYSOPS   114016   AREA- NORTH ATLANTIC   SITE- J8   MUSCLE

LENGTH	NUM	2	MEAN	0.188	S. D.	0.011	LOW	0.180	HIGH	0.196
WEIGHT	NUM	2	MEAN	0.155	S. D.	0.021	LOW	0.140	HIGH	0.170

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0001	0000
MEAN	0.045	0.505	0.070	2.065	0.325	0.030	0.145	0.475	3.44	0.230	0.190	0.000	0.138	0.850	0.440
S. D.	0.035	0.177	0.000	2.029	0.332	0.014	0.021	0.021	0.53	0.014	0.000	0.000	0.025	0.000	0.085
LOW	0.020	0.380	0.070	0.630	0.090	0.020	0.130	0.460	3.06	0.220	0.000	0.000	0.120	0.000	0.380
HIGH	0.070	0.630	0.070	3.500	0.560	0.040	0.160	0.490	3.81	0.240	0.190	0.000	0.155	0.850	0.500

SCUP   STENOTOMUS CHRYSOPS   114016   AREA- NORTH ATLANTIC   SITE- J9   MUSCLE

LENGTH	NUM	2	MEAN	0.191	S. D.	0.010	LOW	0.184	HIGH	0.198
WEIGHT	NUM	2	MEAN	0.162	S. D.	0.009	LOW	0.155	HIGH	0.168

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.070	0.500	0.070	1.800	0.495	0.030	0.095	0.435	3.78	0.190	0.000	0.000	0.170	0.850	0.410
S. D.	0.000	0.269	0.014	0.919	0.078	0.000	0.049	0.177	0.04	0.042	0.000	0.000	0.000	0.000	0.042
LOW	0.000	0.310	0.060	1.150	0.440	0.030	0.060	0.310	3.75	0.160	0.000	0.000	0.170	0.000	0.380
HIGH	0.070	0.690	0.080	2.450	0.550	0.030	0.130	0.560	3.81	0.220	0.000	0.000	0.170	0.850	0.440

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 SCUP                        STENOTOMUS CHRYSOPS                114016   AREA- NORTH ATLANTIC      SITE- M9   MUSCLE

LENGTH     NUM    1   MEAN          0.178   S. D.       0.000   LOW      0.178   HIGH        0.178
WEIGHT     NUM    1   MEAN          0.136   S. D.       0.000   LOW      0.136   HIGH        0.136
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0000    0001    0000
MEAN       0.040   0.905   0.085   2.113   0.595   0.045   0.275   0.450    3.44   0.305   0.130   0.000   0.315   0.000   0.425
S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH       0.040   0.905   0.085   2.113   0.595   0.045   0.275   0.450    3.44   0.305   0.130   0.000   0.315   0.000   0.425

 SCUP                        STENOTOMUS CHRYSOPS                114016   AREA- NORTH ATLANTIC      SITE- N1   MUSCLE

LENGTH     NUM    1   MEAN          0.184   S. D.       0.000   LOW      0.184   HIGH        0.184
WEIGHT     NUM    1   MEAN          0.164   S. D.       0.000   LOW      0.164   HIGH        0.164
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.      0001    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0001    0000    0001    0000
MEAN       0.000   0.440   0.070   1.550   0.710   0.030   0.190   0.500    3.81   0.210   0.000   0.000   0.300   0.000   0.440
S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH       0.000   0.440   0.070   1.550   0.710   0.030   0.190   0.500    3.81   0.210   0.000   0.000   0.300   0.000   0.440

 SCUP                        STENOTOMUS CHRYSOPS                114016   AREA- NORTH ATLANTIC      SITE- N3   MUSCLE

LENGTH     NUM    7   MEAN          0.175   S. D.       0.017   LOW      0.150   HIGH        0.206
WEIGHT     NUM   11   MEAN          0.124   S. D.       0.044   LOW      0.054   HIGH        0.194
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER      0011    0011    0011    0011    0011    0011    0011    0011    0011    0011    0011    0011    0010    0011    0011
N DET.      0002    0000    0000    0000    0000    0000    0000    0000    0000    0000    0008    0008    0000    0002    0000
MEAN       0.058   0.418   0.063   2.911   0.732   0.043   0.151   0.629    3.93   0.255   0.210   0.437   0.255   0.733   0.716
S. D.      0.031   0.210   0.016   1.734   0.231   0.008   0.084   0.257    1.49   0.101   0.147   0.134   0.083   0.276   0.184
LOW        0.020   0.190   0.040   1.440   0.420   0.030   0.060   0.205    1.13   0.090   0.120   0.340   0.150   0.440   0.500
HIGH       0.110   0.845   0.085   7.520   1.050   0.060   0.310   1.000    6.50   0.430   0.380   0.590   0.395   1.310   1.130

 SCUP                        STENOTOMUS CHRYSOPS                114016   AREA- NORTH ATLANTIC      SITE- N4   MUSCLE

LENGTH     NUM    2   MEAN          0.168   S. D.       0.008   LOW      0.162   HIGH        0.174
WEIGHT     NUM    2   MEAN          0.116   S. D.       0.022   LOW      0.100   HIGH        0.131
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER      0002    0002    0002    0002    0002    0002    0002    0002    0001    0002    0002    0002    0002    0002    0002
N DET.      0000    0000    0000    0000    0000    0001    0001    0000    0000    0000    0002    0002    0000    0002    0000
MEAN       0.055   0.315   0.050   2.425   0.550   0.040   0.130   0.245    3.75   0.125   0.000   0.000   0.155   0.000   0.395
S. D.      0.007   0.092   0.028   1.308   0.071   0.000   0.000   0.177    0.00   0.092   0.000   0.000   0.078   0.000   0.021
LOW        0.050   0.250   0.030   1.500   0.500   0.000   0.000   0.120    0.00   0.060   0.000   0.000   0.100   0.000   0.380
HIGH       0.060   0.380   0.070   3.350   0.600   0.040   0.130   0.370    3.75   0.190   0.000   0.000   0.210   0.000   0.410

 SCUP                        STENOTOMUS CHRYSOPS                114016   AREA- NORTH ATLANTIC      SITE- N7   MUSCLE

LENGTH     NUM    1   MEAN          0.144   S. D.       0.000   LOW      0.144   HIGH        0.144
WEIGHT     NUM    1   MEAN          0.077   S. D.       0.000   LOW      0.077   HIGH        0.077
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0001    0000    0001    0000
MEAN       0.025   0.410   0.080   0.720   0.795   0.040   0.125   0.310    3.31   0.260   0.000   0.000   0.200   0.000   0.545
S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH       0.025   0.410   0.080   0.720   0.795   0.040   0.125   0.310    3.31   0.260   0.000   0.000   0.200   0.000   0.545

 SCUP                        STENOTOMUS CHRYSOPS                114016   AREA- NORTH ATLANTIC      SITE- O1   MUSCLE

LENGTH     NUM    6   MEAN          0.187   S. D.       0.029   LOW      0.132   HIGH        0.214
WEIGHT     NUM    6   MEAN          0.161   S. D.       0.045   LOW      0.095   HIGH        0.226
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER      0006    0006    0006    0006    0006    0006    0006    0006    0006    0006    0006    0006    0006    0006    0006
N DET.      0003    0000    0000    0000    0000    0000    0000    0000    0000    0000    0006    0004    0000    0001    0000
MEAN       0.043   0.554   0.089   2.594   0.347   0.049   0.170   0.458    4.37   0.239   0.000   0.285   0.200   0.612   0.742
S. D.      0.021   0.316   0.041   1.439   0.219   0.015   0.095   0.270    1.59   0.113   0.000   0.134   0.070   0.214   0.254
LOW        0.020   0.130   0.020   0.960   0.060   0.035   0.080   0.230    2.06   0.030   0.000   0.190   0.110   0.310   0.380
HIGH       0.060   1.005   0.145   4.576   0.600   0.075   0.345   0.810    6.78   0.370   0.000   0.380   0.300   0.810   1.000

 SCUP                        STENOTOMUS CHRYSOPS                114016   AREA- NORTH ATLANTIC      SITE- O2   MUSCLE

LENGTH     NUM    5   MEAN          0.192   S. D.       0.008   LOW      0.185   HIGH        0.202
WEIGHT     NUM    5   MEAN          0.165   S. D.       0.020   LOW      0.148   HIGH        0.190
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM      PPM     PPM      PPM

NUMBER      0005    0005    0005    0005    0005    0005    0005    0004    0005    0005    0005    0005    0005    0005    0005
N DET.      0001    0000    0000    0000    0000    0000    0000    0000    0000    0000    0005    0005    0000    0001    0000
MEAN       0.105   0.484   0.081   2.556   0.611   0.045   0.218   0.401    4.09   0.223   0.000   0.000   0.245   0.815   0.697
S. D.      0.084   0.159   0.025   1.570   0.172   0.011   0.141   0.173    1.27   0.084   0.000   0.000   0.177   0.166   0.266
LOW        0.020   0.360   0.060   0.490   0.430   0.030   0.060   0.190    3.00   0.130   0.000   0.000   0.140   0.630   0.440
HIGH       0.220   0.750   0.120   4.600   0.880   0.060   0.440   0.545    6.25   0.320   0.000   0.000   0.560   0.970   1.000
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                                  TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS
                                  IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                  BY TISSUE AND LOCATION

SCUP                           STENOTOMUS CHRYSOPS            114016   AREA- NORTH ATLANTIC      SITE- R2   MUSCLE

LENGTH     NUM    5   MEAN        0.341   S. D.      0.029   LOW      0.305   HIGH        0.375
WEIGHT     NUM    5   MEAN        0.848   S. D.      0.123   LOW      0.678   HIGH        0.983
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER     0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0003
N DET.     0000    0001    0002    0000    0000    0003    0000    0000    0000    0001    0005    0004    0000    0002    0000
MEAN      0.187   0.444   0.050   7.708   0.671   0.040   0.304   0.303    2.89   0.208   0.000   0.500   0.116   1.317   0.622
S. D.     0.085   0.098   0.017   3.222   0.250   0.014   0.231   0.070    0.34   0.086   0.000   0.000   0.044   0.273   0.552
LOW       0.050   0.340   0.040   2.800   0.370   0.030   0.100   0.215    2.37   0.140   0.000   0.000   0.070   1.130   0.215
HIGH      0.280   0.550   0.070  11.000   0.980   0.050   0.665   0.410    3.27   0.320   0.000   0.500   0.170   1.630   1.250

SCUP                           STENOTOMUS CHRYSOPS            114016   AREA- NORTH ATLANTIC      SITE- R3   MUSCLE

LENGTH     NUM    5   MEAN        0.168   S. D.      0.032   LOW      0.151   HIGH        0.226
WEIGHT     NUM    5   MEAN        0.133   S. D.      0.078   LOW      0.093   HIGH        0.273
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER     0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005
N DET.     0003    0000    0000    0000    0000    0000    0001    0000    0000    0000    0004    0001    0000    0004    0000
MEAN      0.025   0.445   0.076   2.144   0.476   0.045   0.238   0.396    3.67   0.275   0.180   0.330   0.227   0.630   0.640
S. D.     0.007   0.090   0.020   0.967   0.306   0.011   0.107   0.085    0.59   0.030   0.000   0.209   0.038   0.000   0.309
LOW       0.020   0.345   0.040   0.675   0.050   0.030   0.130   0.275    3.07   0.240   0.000   0.160   0.170   0.000   0.390
HIGH      0.030   0.565   0.090   2.976   0.865   0.060   0.380   0.470    4.56   0.300   0.180   0.630   0.265   0.630   1.160

SCUP                           STENOTOMUS CHRYSOPS            114016   AREA- NORTH ATLANTIC      SITE- R6   MUSCLE

LENGTH     NUM    2   MEAN        0.167   S. D.      0.004   LOW      0.164   HIGH        0.170
WEIGHT     NUM    2   MEAN        0.086   S. D.      0.002   LOW      0.084   HIGH        0.087
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER     0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002
N DET.     0002    0000    0000    0000    0000    0000    0000    0000    0000    0000    0002    0000    0000    0000    0000
MEAN      0.000   0.628   0.088   3.538   0.448   0.050   0.185   0.418    4.44   0.265   0.000   0.285   0.403   1.235   0.595
S. D.     0.000   0.004   0.011   0.336   0.209   0.000   0.007   0.117    0.70   0.007   0.000   0.134   0.032   0.021   0.049
LOW       0.000   0.625   0.080   3.300   0.300   0.050   0.180   0.335    3.94   0.260   0.000   0.190   0.380   1.220   0.560
HIGH      0.000   0.630   0.095   3.775   0.596   0.050   0.190   0.500    4.93   0.270   0.000   0.380   0.425   1.250   0.630

SCUP                           STENOTOMUS CHRYSOPS            114016   AREA- SOUTH ATLANTIC      SITE- B5   MUSCLE

LENGTH     NUM    2   MEAN        0.163   S. D.      0.000   LOW      0.163   HIGH        0.163
WEIGHT     NUM    2   MEAN        0.096   S. D.      0.002   LOW      0.094   HIGH        0.097
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER     0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002
N DET.     0000    0000    0001    0000    0000    0002    0000    0000    0000    0000    0002    0002    0000    0001    0000
MEAN      0.060   0.465   0.140  14.855   1.005   0.000   0.290   0.430    3.57   0.320   0.000   0.000   0.215   0.450   0.475
S. D.     0.042   0.163   0.000   4.943   0.304   0.000   0.269   0.099    0.51   0.255   0.000   0.000   0.049   0.000   0.106
LOW       0.030   0.350   0.000  11.360   0.790   0.000   0.100   0.360    3.21   0.140   0.000   0.000   0.180   0.000   0.400
HIGH      0.090   0.580   0.140  18.350   1.220   0.000   0.480   0.500    3.93   0.500   0.000   0.000   0.250   0.450   0.550

SCUP                           STENOTOMUS CHRYSOPS            114016   AREA- SOUTH ATLANTIC      SITE- B6   MUSCLE

LENGTH     NUM    2   MEAN        0.157   S. D.      0.017   LOW      0.145   HIGH        0.169
WEIGHT     NUM    2   MEAN        0.083   S. D.      0.021   LOW      0.068   HIGH        0.097
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER     0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000
MEAN      0.285   0.495   0.055   4.304   0.752   0.048   0.228   0.435    3.57   0.188   0.158   0.540   0.238   1.063   0.975
S. D.     0.332   0.262   0.021   0.719   0.083   0.004   0.124   0.078    0.52   0.053   0.152   0.552   0.018   0.265   0.035
LOW       0.050   0.310   0.040   3.795   0.693   0.045   0.140   0.380    3.20   0.150   0.050   0.150   0.225   0.875   0.950
HIGH      0.520   0.680   0.070   4.812   0.810   0.050   0.315   0.490    3.94   0.225   0.265   0.930   0.250   1.250   1.000

SCUP                           STENOTOMUS CHRYSOPS            114016   AREA- SOUTH ATLANTIC      SITE- B8   MUSCLE

LENGTH     NUM    2   MEAN        0.169   S. D.      0.011   LOW      0.161   HIGH        0.176
WEIGHT     NUM    2   MEAN        0.100   S. D.      0.016   LOW      0.088   HIGH        0.111
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER     0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002
N DET.     0000    0000    0001    0000    0000    0002    0000    0000    0000    0000    0002    0002    0000    0000    0000
MEAN      0.090   0.924   0.110  13.208   0.798   0.000   0.278   0.523    3.87   0.303   0.000   0.000   0.270   1.468   0.600
S. D.     0.021   0.072   0.000   4.876   0.209   0.000   0.054   0.110    1.61   0.025   0.000   0.000   0.007   0.753   0.000
LOW       0.075   0.873   0.000   9.760   0.650   0.000   0.240   0.445    2.73   0.285   0.000   0.000   0.265   0.935   0.600
HIGH      0.105   0.975   0.110  16.655   0.945   0.000   0.316   0.600    5.00   0.320   0.000   0.000   0.275   2.000   0.600

SCUP                           STENOTOMUS CHRYSOPS            114016   AREA- SOUTH ATLANTIC      SITE- C2   MUSCLE

LENGTH     NUM    2   MEAN        0.209   S. D.      0.021   LOW      0.194   HIGH        0.224
WEIGHT     NUM    2   MEAN        0.214   S. D.      0.088   LOW      0.152   HIGH        0.276
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM

NUMBER     0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002    0002
N DET.     0000    0000    0000    0000    0000    0001    0000    0000    0000    0000    0001    0001    0000    0000    0000
MEAN      0.175   0.590   0.048   6.383   0.698   0.070   0.150   0.170    3.96   0.290   0.870   0.200   0.148   1.298   0.855
S. D.     0.064   0.014   0.011   0.448   0.074   0.000   0.071   0.113    0.54   0.099   0.000   0.000   0.011   0.067   0.276
LOW       0.130   0.580   0.040   6.066   0.645   0.000   0.100   0.090    3.57   0.220   0.000   0.000   0.140   1.250   0.660
HIGH      0.220   0.600   0.055   6.700   0.750   0.070   0.200   0.250    4.34   0.360   0.870   0.200   0.155   1.345   1.050
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

SCUP STENOTOMUS CHRYSOPS 114016 AREA- SOUTH ATLANTIC SITE- G1 MUSCLE

NGTH NUM 1 MEAN 0.114 S. D. 0.000 LOW 0.114 HIGH 0.114
IGHT NUM 1 MEAN 0.032 S. D. 0.000 LOW 0.032 HIGH 0.032

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
MBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
EAN	0.040	0.430	0.075	14.620	1.455	0.090	0.260	0.410	5.38	0.410	0.060	0.000	0.315	0.500	0.695
D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.040	0.430	0.075	14.620	1.455	0.090	0.260	0.410	5.38	0.410	0.060	0.000	0.315	0.500	0.695

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- CALIFORNIA SITE- B5 MUSCLE

ENGTH NUM 10 MEAN 0.631 S. D. 0.048 LOW 0.569 HIGH 0.711
WEIGHT NUM 10 MEAN 2.211 S. D. 0.646 LOW 1.559 HIGH 3.402

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0008
DET.	0000	0002	0003	0000	0001	0004	0002	0001	0000	0003	0007	0008	0000	0004	0000
EAN	0.291	0.328	0.118	3.636	0.514	0.025	0.188	0.243	2.26	0.343	0.457	0.520	0.101	0.668	0.586
S. D.	0.115	0.230	0.111	1.761	0.223	0.014	0.151	0.142	0.89	0.185	0.405	0.368	0.073	0.226	0.435
LOW	0.090	0.060	0.030	1.350	0.250	0.010	0.070	0.085	0.71	0.170	0.060	0.260	0.030	0.400	0.300
IGH	0.420	0.727	0.340	7.050	0.880	0.040	0.500	0.580	3.57	0.660	0.870	0.780	0.250	1.000	1.600

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- CALIFORNIA SITE- B8 MUSCLE

LENGTH NUM 10 MEAN 0.579 S. D. 0.024 LOW 0.541 HIGH 0.610
WEIGHT NUM 10 MEAN 1.568 S. D. 0.181 LOW 1.247 HIGH 1.843

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0001	0003	0000	0000	0005	0000	0000	0000	0001	0010	0010	0001	0003	0000
MEAN	0.078	0.460	0.088	2.943	0.370	0.050	0.147	0.246	3.36	0.286	0.000	0.000	0.127	0.636	0.524
S. D.	0.035	0.304	0.023	1.290	0.117	0.024	0.098	0.059	1.07	0.133	0.000	0.000	0.059	0.205	0.095
LOW	0.040	0.080	0.070	1.746	0.160	0.030	0.060	0.180	2.51	0.110	0.000	0.000	0.030	0.330	0.400
HIGH	0.130	1.085	0.125	5.100	0.505	0.082	0.330	0.370	6.30	0.440	0.000	0.000	0.220	0.940	0.675

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- CALIFORNIA SITE- F8 MUSCLE

LENGTH NUM 10 MEAN 0.714 S. D. 0.035 LOW 0.657 HIGH 0.780
WEIGHT NUM 10 MEAN 3.297 S. D. 0.455 LOW 2.608 HIGH 4.082

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0000	0006	0000	0000	0008	0000	0000	0000	0005	0009	0009	0001	0000	0000
MEAN	0.472	0.341	0.084	6.323	0.532	0.118	0.166	0.147	2.76	0.174	0.870	0.120	0.060	0.384	0.489
S. D.	0.121	0.219	0.052	3.446	0.329	0.011	0.145	0.053	1.11	0.103	0.000	0.000	0.027	0.254	0.417
LOW	0.230	0.100	0.040	3.150	0.150	0.110	0.040	0.085	1.80	0.070	0.000	0.000	0.035	0.120	0.180
HIGH	0.670	0.863	0.145	12.400	1.410	0.125	0.486	0.250	5.47	0.310	0.870	0.120	0.100	0.940	1.560

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- CALIFORNIA SITE- F8 LIVER

LENGTH NUM 1 MEAN 0.750 S. D. 0.000 LOW 0.750 HIGH 0.750
WEIGHT NUM 1 MEAN 3.686 S. D. 0.000 LOW 3.686 HIGH 3.686

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0000	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	1.000	0.560	2.310	0.000	0.000	0.040	0.910	6.560	27.25	0.200	0.000	0.000	0.340	0.440	0.220
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	1.000	0.560	2.310	0.000	0.000	0.040	0.910	6.560	27.25	0.200	0.000	0.000	0.340	0.440	0.220

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- CALIFORNIA SITE- K3 MUSCLE

LENGTH NUM 10 MEAN 0.642 S. D. 0.055 LOW 0.577 HIGH 0.750
WEIGHT NUM 10 MEAN 3.125 S. D. 0.993 LOW 2.080 HIGH 5.670

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0001	0002	0001	0000	0006	0000	0000	0000	0001	0008	0006	0000	0002	0000
MEAN	0.480	0.710	0.075	4.479	0.579	0.034	0.171	0.230	4.49	0.212	0.250	0.370	0.145	0.781	0.623
S. D.	0.131	0.670	0.037	1.973	0.140	0.021	0.083	0.098	2.37	0.147	0.042	0.289	0.081	0.388	0.356
LOW	0.240	0.175	0.020	1.790	0.340	0.020	0.050	0.125	1.81	0.030	0.220	0.200	0.030	0.250	0.330
HIGH	0.660	2.130	0.140	7.333	0.760	0.065	0.313	0.430	9.06	0.430	0.280	0.800	0.280	1.440	1.500

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- CALIFORNIA SITE- K3 LIVER

LENGTH NUM 1 MEAN 0.641 S. D. 0.000 LOW 0.641 HIGH 0.641
WEIGHT NUM 1 MEAN 3.125 S. D. 0.000 LOW 3.125 HIGH 3.125

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	3.880	0.432	7.250	6.450	1.795	0.180	0.113	8.395	26.82	0.535	0.080	2.615	0.535	0.685	0.365
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	3.880	0.432	7.250	6.450	1.795	0.180	0.113	8.395	26.82	0.535	0.080	2.615	0.535	0.685	0.365

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- PACIFIC NORTHWEST SITE- G9 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	6	0.513	0.034	0.470	0.550
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	00
N DET.	0001	0000	0003	0000	0000	0003	0000	0000	0000	0002	0005	0006	0001	0001	00
MEAN	0.079	0.298	0.047	2.257	0.451	0.027	0.118	0.252	3.08	0.358	0.100	0.000	0.076	1.091	0.4
S. D.	0.062	0.165	0.021	1.417	0.173	0.015	0.086	0.094	0.80	0.150	0.000	0.000	0.011	0.833	0.1
LOW	0.040	0.150	0.030	0.200	0.305	0.010	0.040	0.140	2.50	0.205	0.000	0.000	0.060	0.345	0.210
HIGH	0.170	0.610	0.070	4.100	0.770	0.040	0.245	0.390	4.62	0.540	0.100	0.000	0.090	2.500	0.630

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- PACIFIC NORTHWEST SITE- G9 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.525	0.000	0.525	0.525
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	000
MEAN	0.035	0.496	0.780	2.580	1.570	0.070	0.265	2.280	18.94	0.785	0.195	0.000	1.130	0.320	0.40
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.035	0.496	0.780	2.580	1.570	0.070	0.265	2.280	18.94	0.785	0.195	0.000	1.130	0.320	0.400

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- PACIFIC NORTHWEST SITE- H7 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	4	0.544	0.073	0.485	0.650
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0003	0003	0004	0004	0004	0004	0004	0004	0004	0004	0004	000
N DET.	0001	0000	0001	0000	0001	0001	0000	0000	0000	0000	0002	0003	0000	0000	0000
MEAN	0.017	0.358	0.092	3.072	0.483	0.030	0.250	0.290	3.53	0.121	0.240	0.700	0.076	0.758	0.478
S. D.	0.006	0.220	0.078	1.108	0.329	0.017	0.117	0.055	0.53	0.071	0.156	0.000	0.024	0.345	0.134
LOW	0.010	0.150	0.035	2.295	0.250	0.010	0.110	0.230	2.77	0.052	0.130	0.000	0.045	0.400	0.34
HIGH	0.020	0.555	0.180	4.340	0.715	0.040	0.370	0.360	4.00	0.220	0.350	0.700	0.100	1.215	0.66

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- PACIFIC NORTHWEST SITE- I7 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.505	0.000	0.505	0.505
WEIGHT	1	1.020	0.000	1.020	1.020

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.120	0.210	0.050	3.560	0.655	0.026	0.403	0.190	2.43	0.183	0.060	0.130	0.130	0.440	0.52
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.120	0.210	0.050	3.560	0.655	0.026	0.403	0.190	2.43	0.183	0.060	0.130	0.130	0.440	0.52

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- PACIFIC NORTHWEST SITE- M1 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	8	0.609	0.085	0.450	0.700
WEIGHT	3	3.782	0.260	3.632	4.082

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0007
N DET.	0000	0000	0003	0000	0000	0004	0000	0000	0000	0002	0006	0007	0000	0001	000
MEAN	0.114	0.370	0.091	2.778	0.427	0.034	0.318	0.230	3.78	0.322	0.210	0.800	0.129	0.474	0.41
S. D.	0.086	0.200	0.038	1.530	0.130	0.007	0.299	0.054	0.71	0.112	0.226	0.000	0.087	0.280	0.13
LOW	0.030	0.145	0.050	0.550	0.326	0.025	0.050	0.165	2.73	0.195	0.050	0.000	0.040	0.150	0.18
HIGH	0.270	0.650	0.140	4.960	0.740	0.040	0.950	0.305	5.00	0.485	0.370	0.800	0.290	1.010	0.566

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- PACIFIC NORTHWEST SITE- M1 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.545	0.000	0.545	0.545
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0001	0000	0001	0000	0001	0000
MEAN	0.140	0.300	1.750	2.240	2.330	0.000	0.050	5.110	21.43	0.000	0.200	0.000	1.210	0.000	0.350
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.140	0.300	1.750	2.240	2.330	0.000	0.050	5.110	21.43	0.000	0.200	0.000	1.210	0.000	0.350

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- PACIFIC NORTHWEST SITE- M5 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	5	0.512	0.164	0.390	0.790
WEIGHT	1	1.816	0.000	1.816	1.816

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0004	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0004	0000	0000	0000
MEAN	0.206	0.379	0.087	2.405	0.825	0.054	0.302	0.302	4.39	0.313	0.265	0.630	0.160	0.545	0.517
S. D.	0.166	0.136	0.037	1.247	0.354	0.047	0.148	0.205	1.35	0.250	0.064	0.000	0.070	0.236	0.182
LOW	0.040	0.250	0.050	1.160	0.493	0.020	0.160	0.070	3.05	0.070	0.220	0.000	0.120	0.250	0.250
HIGH	0.440	0.570	0.140	3.880	1.260	0.130	0.520	0.620	6.57	0.660	0.310	0.630	0.285	0.816	0.733

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                                      TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS
                                      IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                     BY TISSUE AND LOCATION

 SABLEFISH                     ANOPLOPOMA FIMBRIA            126001   AREA- PACIFIC NORTHWEST   SITE- M8   MUSCLE

 LENGTH     NUM   10   MEAN      0.856   S. D.      0.057   LOW      0.710   HIGH        0.910
 WEIGHT     NUM   0    MEAN      0.000   S. D.      0.000   LOW      0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER    0010    0010    0010    0009    0009    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010
 N DET.    0000    0000    0000    0000    0000    0003    0000    0001    0000    0000    0005    0006    0000    0002    0000
 MEAN     0.480   0.389   0.072   2.603   0.487   0.037   0.216   0.149    2.44   0.204   0.276   0.303   0.101   0.704   0.452
 S. D.    0.125   0.192   0.037   1.180   0.186   0.032   0.088   0.082    0.89   0.097   0.340   0.223   0.056   0.331   0.128
 LOW      0.335   0.120   0.040   1.263   0.290   0.010   0.080   0.035    1.55   0.020   0.050   0.110   0.040   0.150   0.310
 HIGH     0.700   0.650   0.145   4.850   0.860   0.100   0.350   0.270    3.93   0.320   0.870   0.620   0.210   1.120   0.625

 SABLEFISH                     ANOPLOPOMA FIMBRIA            126001   AREA- PACIFIC NORTHWEST   SITE- M8   LIVER

 LENGTH     NUM   1    MEAN      0.850   S. D.      0.000   LOW      0.850   HIGH        0.850
 WEIGHT     NUM   0    MEAN      0.000   S. D.      0.000   LOW      0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
 N DET.    0000    0000    0000    0000    0000    0001    0000    0000    0000    0001    0001    0001    0000    0001    0000
 MEAN     1.350   0.150   5.530   5.400   1.740   0.000   1.455   2.890   20.00   0.000   0.000   0.000   1.570   0.000   0.300
 S. D.    0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 LOW      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 HIGH     1.350   0.150   5.530   5.400   1.740   0.000   1.455   2.890   20.00   0.000   0.000   0.000   1.570   0.000   0.300

 SABLEFISH                     ANOPLOPOMA FIMBRIA            126001   AREA- PACIFIC NORTHWEST   SITE- N1   MUSCLE

 LENGTH     NUM   8    MEAN      0.515   S. D.      0.034   LOW      0.475   HIGH        0.580
 WEIGHT     NUM   6    MEAN      1.153   S. D.      0.231   LOW      0.908   HIGH        1.588
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER    0009    0009    0009    0009    0009    0009    0009    0009    0009    0009    0009    0009    0009    0009    0009
 N DET.    0000    0000    0001    0000    0000    0006    0001    0000    0000    0000    0007    0007    0001    0002    0000
 MEAN     0.220   0.251   0.062   3.987   0.440   0.033   0.193   0.260    3.47   0.331   0.720   0.370   0.149   0.796   0.568
 S. D.    0.063   0.084   0.027   2.146   0.227   0.012   0.110   0.053    0.58   0.141   0.000   0.354   0.048   0.364   0.218
 LOW      0.170   0.150   0.030   1.300   0.185   0.020   0.040   0.155    2.46   0.130   0.720   0.120   0.070   0.400   0.300
 HIGH     0.330   0.405   0.110   8.200   0.985   0.040   0.403   0.355    4.27   0.570   0.720   0.620   0.210   1.280   1.000

 SABLEFISH                     ANOPLOPOMA FIMBRIA            126001   AREA- PACIFIC NORTHWEST   SITE- N1   LIVER

 LENGTH     NUM   1    MEAN      0.510   S. D.      0.000   LOW      0.510   HIGH        0.510
 WEIGHT     NUM   1    MEAN      1.179   S. D.      0.000   LOW      1.179   HIGH        1.179
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
 N DET.    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0000    0001    0000
 MEAN     0.410   0.380   0.540  11.240   1.470   0.290   0.155  10.500   24.29   0.540   0.130   0.000   1.290   0.000   0.300
 S. D.    0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 LOW      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 HIGH     0.410   0.380   0.540  11.240   1.470   0.290   0.155  10.500   24.29   0.540   0.130   0.000   1.290   0.000   0.300

 SABLEFISH                     ANOPLOPOMA FIMBRIA            126001   AREA- ALASKA              SITE- N6   MUSCLE

 LENGTH     NUM   10   MEAN      0.620   S. D.      0.088   LOW      0.480   HIGH        0.775
 WEIGHT     NUM   10   MEAN      2.696   S. D.      1.279   LOW      0.907   HIGH        5.663
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010
 N DET.    0000    0000    0000    0000    0000    0001    0000    0000    0000    0000    0006    0006    0000    0001    0000
 MEAN     0.139   0.690   0.051   1.992   0.364   0.033   0.270   0.180    3.54   0.153   0.225   0.368   0.123   0.656   0.585
 S. D.    0.056   0.241   0.013   0.736   0.126   0.010   0.165   0.091    1.02   0.054   0.247   0.177   0.048   0.206   0.217
 LOW      0.060   0.260   0.035   0.700   0.190   0.020   0.130   0.040    2.53   0.060   0.060   0.250   0.060   0.265   0.250
 HIGH     0.240   1.095   0.070   3.247   0.593   0.050   0.600   0.335    6.00   0.235   0.590   0.630   0.190   1.000   1.045

 SABLEFISH                     ANOPLOPOMA FIMBRIA            126001   AREA- ALASKA              SITE- N6   LIVER

 LENGTH     NUM   8    MEAN      0.625   S. D.      0.097   LOW      0.480   HIGH        0.775
 WEIGHT     NUM   8    MEAN      2.747   S. D.      1.440   LOW      0.907   HIGH        5.663
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER    0008    0007    0007    0006    0003    0007    0007    0007    0007    0007    0007    0007    0007    0007    0007
 N DET.    0000    0000    0000    0000    0000    0002    0000    0000    0000    0001    0005    0005    0000    0001    0000
 MEAN     0.210   0.421   2.097   2.045   1.477   0.034   0.093   1.223   13.65   0.175   0.125   0.345   0.599   0.637   0.486
 S. D.    0.106   0.277   1.404   0.982   0.178   0.009   0.047   0.628    6.61   0.074   0.092   0.049   0.418   0.242   0.172
 LOW      0.100   0.060   0.150   1.150   1.350   0.020   0.020   0.060    0.69   0.080   0.060   0.310   0.060   0.310   0.190
 HIGH     0.430   0.750   4.120   3.822   1.680   0.040   0.130   2.000   19.37   0.290   0.190   0.380   1.340   1.000   0.750

 SABLEFISH                     ANOPLOPOMA FIMBRIA            126001   AREA- ALASKA              SITE- R1   MUSCLE

 LENGTH     NUM   10   MEAN      0.635   S. D.      0.020   LOW      0.610   HIGH        0.676
 WEIGHT     NUM   10   MEAN      2.815   S. D.      0.206   LOW      2.497   HIGH        3.178
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010
 N DET.    0001    0000    0001    0000    0000    0001    0001    0001    0000    0000    0007    0007    0000    0000    0000
 MEAN     0.119   0.319   0.054   2.198   0.444   0.020   0.192   0.239    2.70   0.131   0.265   0.663   0.076   0.498   0.514
 S. D.    0.137   0.076   0.027   0.930   0.255   0.009   0.053   0.063    0.39   0.048   0.316   0.321   0.024   0.239   0.149
 LOW      0.020   0.190   0.025   0.466   0.100   0.010   0.095   0.120    1.87   0.060   0.075   0.360   0.050   0.220   0.310
 HIGH     0.470   0.440   0.120   3.725   1.050   0.030   0.250   0.310    3.25   0.210   0.630   1.000   0.130   0.940   0.780
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

SABLEFISH ANOPLOPOMA FIMBRIA 126001 AREA- ALASKA SITE- R1 LIVER

LENGTH	NUM	1	MEAN	0.635	S. D.	0.000	LOW	0.635	HIGH	0.635
WEIGHT	NUM	1	MEAN	2.815	S. D.	0.000	LOW	2.815	HIGH	2.815

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.105	0.315	1.010	1.825	1.195	0.030	0.595	0.440	30.16	0.185	0.190	0.380	0.420	0.250	0.345
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.105	0.315	1.010	1.825	1.195	0.030	0.595	0.440	30.16	0.185	0.190	0.380	0.420	0.250	0.345

PERCH, OCEAN (PAC.) SEBASTES ALUTUS 131023 AREA- PACIFIC NORTHWEST SITE- G9 MUSCLE

LENGTH	NUM	10	MEAN	0.353	S. D.	0.003	LOW	0.350	HIGH	0.355
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0008	0008	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0007	0001	0005	0000	0000	0006	0002	0000	0000	0003	0010	0010	0002	0002	0000
MEAN	0.040	0.379	0.076	2.878	0.896	0.043	0.179	0.228	3.80	0.400	0.000	0.000	0.132	0.646	0.507
S. D.	0.017	0.196	0.036	1.645	0.212	0.005	0.098	0.075	0.69	0.170	0.000	0.000	0.032	0.376	0.211
LOW	0.020	0.120	0.050	0.200	0.650	0.040	0.050	0.120	2.86	0.260	0.000	0.000	0.070	0.250	0.190
HIGH	0.050	0.835	0.140	5.600	1.240	0.050	0.317	0.355	5.00	0.770	0.000	0.000	0.160	1.130	0.840

PERCH, OCEAN (PAC.) SEBASTES ALUTUS 131023 AREA- PACIFIC NORTHWEST SITE- G9 LIVER

LENGTH	NUM	10	MEAN	0.353	S. D.	0.003	LOW	0.350	HIGH	0.355
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0008
N DET.	0008	0000	0000	0000	0000	0004	0001	0000	0000	0000	0003	0006	0000	0003	0000
MEAN	0.010	0.309	0.855	2.362	2.527	0.048	0.156	2.134	36.33	0.260	0.251	0.125	0.661	0.588	0.420
S. D.	0.000	0.153	0.157	1.302	1.057	0.046	0.094	0.790	23.13	0.074	0.283	0.006	0.228	0.486	0.267
LOW	0.000	0.100	0.640	0.500	0.280	0.020	0.040	1.070	15.00	0.170	0.050	0.120	0.320	0.190	0.180
HIGH	0.010	0.560	1.180	4.550	4.000	0.140	0.265	3.310	96.87	0.380	0.870	0.130	1.000	1.370	0.810

PERCH, OCEAN (PAC.) SEBASTES ALUTUS 131023 AREA- PACIFIC NORTHWEST SITE- M1 MUSCLE

LENGTH	NUM	10	MEAN	0.379	S. D.	0.011	LOW	0.365	HIGH	0.400
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0001	0001	0003	0000	0000	0005	0000	0000	0000	0002	0008	0010	0000	0004	0000
MEAN	0.053	0.506	0.081	3.464	1.028	0.037	0.246	0.185	3.32	0.326	0.188	0.000	0.101	0.798	0.606
S. D.	0.023	0.259	0.031	1.874	0.310	0.007	0.343	0.064	0.86	0.226	0.230	0.000	0.040	0.449	0.176
LOW	0.020	0.300	0.045	0.400	0.555	0.030	0.040	0.070	1.89	0.070	0.025	0.000	0.040	0.260	0.350
HIGH	0.080	0.950	0.130	6.550	1.615	0.045	1.200	0.300	4.44	0.820	0.350	0.000	0.180	1.250	0.850

PERCH, OCEAN (PAC.) SEBASTES ALUTUS 131023 AREA- PACIFIC NORTHWEST SITE- M1 LIVER

LENGTH	NUM	8	MEAN	0.378	S. D.	0.012	LOW	0.365	HIGH	0.400
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0007	0007	0008	0008	0008	0008	0008	0008	0008	0008	0008	0007
N DET.	0004	0000	0000	0000	0000	0007	0000	0000	0000	0002	0000	0002	0000	0001	0000
MEAN	0.030	0.365	1.466	2.462	3.075	0.020	0.173	3.471	41.42	0.264	0.180	0.255	0.738	0.586	0.319
S. D.	0.008	0.223	0.312	0.683	0.733	0.000	0.127	1.736	9.42	0.109	0.113	0.142	0.151	0.439	0.238
LOW	0.020	0.020	0.970	1.360	2.340	0.000	0.100	1.690	29.63	0.060	0.070	0.090	0.520	0.120	0.100
HIGH	0.040	0.690	1.780	3.420	4.450	0.020	0.480	7.120	58.12	0.370	0.440	0.440	1.000	1.440	0.810

PERCH, OCEAN (PAC.) SEBASTES ALUTUS 131023 AREA- PACIFIC NORTHWEST SITE- M5 MUSCLE

LENGTH	NUM	10	MEAN	0.365	S. D.	0.000	LOW	0.365	HIGH	0.365
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0001	0001	0000	0000	0000	0003	0001	0000	0000	0002	0006	0007	0001	0002	0000
MEAN	0.074	0.403	0.075	4.972	0.806	0.040	0.198	0.228	3.97	0.284	0.175	0.297	0.121	0.549	0.491
S. D.	0.043	0.163	0.052	2.373	0.079	0.010	0.107	0.076	0.57	0.176	0.131	0.015	0.045	0.237	0.180
LOW	0.030	0.225	0.030	1.553	0.680	0.030	0.085	0.110	2.86	0.110	0.060	0.280	0.070	0.185	0.250
HIGH	0.150	0.680	0.180	8.200	0.905	0.060	0.405	0.360	4.96	0.680	0.350	0.310	0.210	0.940	0.850

ROCKFISH, COPPER SEBASTES CAURINUS 131031 AREA- PACIFIC NORTHWEST SITE- I7 MUSCLE

LENGTH	NUM	10	MEAN	0.454	S. D.	0.013	LOW	0.450	HIGH	0.490
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0008	0008	0000	0000	0000
MEAN	0.283	0.501	0.076	2.110	0.733	0.045	0.162	0.241	2.97	0.238	0.250	0.188	0.108	0.728	0.561
S. D.	0.060	0.294	0.037	0.966	0.314	0.019	0.080	0.098	0.51	0.097	0.085	0.180	0.028	0.145	0.184
LOW	0.210	0.190	0.030	0.825	0.270	0.010	0.060	0.060	2.19	0.130	0.190	0.060	0.060	0.440	0.250
HIGH	0.390	1.000	0.140	3.610	1.240	0.080	0.310	0.375	3.81	0.485	0.310	0.315	0.155	0.905	0.880

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

ROCKFISH, YELLOWTAIL SEBASTES FLAVIDUS 131043 AREA- PACIFIC NORTHWEST SITE- M2 MUSCLE

LENGTH NUM 4 MEAN 0.479 S. D. 0.021 LOW 0.465 HIGH 0.510
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0001	0000	0000	0003	0000	0000	0000	0001	0004	0004	0000	0002	0000
MEAN	0.154	0.382	0.060	3.693	0.938	0.030	0.109	0.278	5.87	0.393	0.000	0.000	0.146	0.430	0.448
S. D.	0.051	0.050	0.026	2.368	0.224	0.000	0.051	0.052	2.68	0.251	0.000	0.000	0.084	0.212	0.100
LOW	0.100	0.320	0.040	1.310	0.780	0.000	0.040	0.210	2.88	0.215	0.000	0.000	0.075	0.280	0.300
HIGH	0.220	0.443	0.090	6.600	1.270	0.030	0.153	0.336	8.57	0.680	0.000	0.000	0.250	0.580	0.520

ROCKFISH, YELLOWTAIL SEBASTES FLAVIDUS 131043 AREA- PACIFIC NORTHWEST SITE- M5 MUSCLE

LENGTH NUM 16 MEAN 0.477 S. D. 0.014 LOW 0.460 HIGH 0.500
WEIGHT NUM 9 MEAN 1.664 S. D. 0.227 LOW 1.588 HIGH 2.268

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016
N DET.	0000	0001	0009	0001	0000	0012	0001	0000	0000	0003	0013	0014	0000	0003	0000
MEAN	0.209	0.386	0.056	2.478	0.944	0.046	0.245	0.271	3.77	0.278	0.253	0.775	0.089	0.694	0.523
S. D.	0.076	0.201	0.040	1.120	0.303	0.039	0.149	0.074	0.83	0.139	0.167	0.672	0.027	0.594	0.282
LOW	0.090	0.150	0.030	0.800	0.490	0.015	0.070	0.180	2.29	0.110	0.060	0.300	0.055	0.060	0.200
HIGH	0.400	0.750	0.140	5.240	1.600	0.100	0.700	0.420	5.01	0.580	0.350	1.250	0.140	2.100	1.100

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- E9 MUSCLE

LENGTH NUM 22 MEAN 0.348 S. D. 0.033 LOW 0.266 HIGH 0.400
WEIGHT NUM 22 MEAN 0.933 S. D. 0.331 LOW 0.454 HIGH 1.530

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022	0022
N DET.	0002	0000	0000	0001	0000	0003	0004	0000	0000	0000	0018	0020	0000	0000	0000
MEAN	0.097	0.380	0.054	2.558	0.909	0.027	0.182	0.224	3.20	0.188	0.239	0.125	0.089	0.510	0.448
S. D.	0.052	0.144	0.026	1.128	0.314	0.011	0.175	0.061	0.50	0.073	0.219	0.007	0.015	0.147	0.145
LOW	0.020	0.190	0.030	0.303	0.350	0.010	0.060	0.110	1.94	0.060	0.075	0.120	0.060	0.310	0.130
HIGH	0.210	0.660	0.155	4.600	1.450	0.040	0.810	0.345	3.94	0.400	0.560	0.130	0.115	0.860	0.755

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- I6 MUSCLE

LENGTH NUM 5 MEAN 0.298 S. D. 0.017 LOW 0.278 HIGH 0.317
WEIGHT NUM 5 MEAN 0.493 S. D. 0.082 LOW 0.397 HIGH 0.587

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.069	0.389	0.065	2.815	1.126	0.050	0.271	0.236	4.12	0.217	0.120	0.400	0.237	0.919	0.681
S. D.	0.040	0.093	0.029	1.409	1.008	0.010	0.186	0.121	0.57	0.081	0.049	0.167	0.198	0.119	0.196
LOW	0.030	0.250	0.030	0.900	0.500	0.040	0.122	0.030	3.19	0.150	0.060	0.260	0.125	0.750	0.500
HIGH	0.130	0.440	0.110	4.700	2.890	0.060	0.530	0.340	4.56	0.350	0.180	0.620	0.590	1.060	1.000

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- J4 MUSCLE

LENGTH NUM 14 MEAN 0.315 S. D. 0.046 LOW 0.260 HIGH 0.385
WEIGHT NUM 14 MEAN 0.582 S. D. 0.304 LOW 0.282 HIGH 1.149

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014	0014
N DET.	0001	0000	0000	0000	0000	0006	0003	0000	0000	0000	0012	0014	0000	0001	0000
MEAN	0.161	0.400	0.057	3.084	0.742	0.033	0.105	0.213	3.38	0.183	0.095	0.000	0.106	0.514	0.465
S. D.	0.106	0.181	0.011	1.477	0.282	0.010	0.095	0.052	0.56	0.042	0.049	0.000	0.037	0.137	0.189
LOW	0.040	0.190	0.040	0.783	0.285	0.020	0.050	0.150	2.90	0.115	0.060	0.000	0.080	0.310	0.220
HIGH	0.360	0.880	0.075	5.600	1.370	0.050	0.380	0.310	5.00	0.240	0.130	0.000	0.220	0.750	0.940

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- J5 MUSCLE

LENGTH NUM 13 MEAN 0.335 S. D. 0.032 LOW 0.284 HIGH 0.388
WEIGHT NUM 13 MEAN 0.778 S. D. 0.289 LOW 0.364 HIGH 1.299

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0013	0013	0013	0013	0013	0013	0012	0013	0013	0013	0013	0013	0013	0013
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0011	0009	0000	0000	0000
MEAN	0.243	0.566	0.065	3.255	0.710	0.036	0.218	0.270	3.83	0.207	0.190	0.156	0.101	0.671	0.567
S. D.	0.088	0.329	0.036	1.327	0.244	0.014	0.185	0.196	1.02	0.084	0.000	0.092	0.046	0.119	0.165
LOW	0.140	0.250	0.035	1.000	0.400	0.020	0.060	0.120	2.75	0.110	0.190	0.060	0.060	0.530	0.380
HIGH	0.460	1.500	0.170	5.687	1.120	0.070	0.750	0.810	5.63	0.450	0.190	0.280	0.230	0.880	0.815

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- J7 MUSCLE

LENGTH NUM 6 MEAN 0.299 S. D. 0.020 LOW 0.276 HIGH 0.326
WEIGHT NUM 6 MEAN 0.453 S. D. 0.125 LOW 0.317 HIGH 0.608

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0004	0000	0000	0000
MEAN	0.058	0.495	0.056	2.995	0.693	0.047	0.141	0.213	3.87	0.187	0.060	0.140	0.115	0.796	0.516
S. D.	0.024	0.182	0.022	1.222	0.307	0.015	0.056	0.096	0.73	0.043	0.000	0.071	0.037	0.075	0.227
LOW	0.020	0.190	0.030	1.750	0.080	0.030	0.090	0.040	2.63	0.150	0.000	0.090	0.080	0.685	0.060
HIGH	0.090	0.690	0.080	4.500	0.890	0.060	0.250	0.280	4.87	0.270	0.060	0.190	0.170	0.910	0.645

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES: BY TISSUE AND LOCATION

LOCATION LEVEL 5

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- J9 MUSCLE

LENGTH	NUM	1	MEAN	0.331	S. D.	0.000	LOW	0.331	HIGH	0.331
WEIGHT	NUM	1	MEAN	0.681	S. D.	0.000	LOW	0.681	HIGH	0.681

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.130	0.370	0.010	2.475	0.630	0.040	0.000	0.250	2.56	0.220	0.870	0.500	0.060	1.060	0.870
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.130	0.370	0.010	2.475	0.630	0.040	0.000	0.250	2.56	0.220	0.870	0.500	0.060	1.060	0.870

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- J9 LIVER

LENGTH	NUM	1	MEAN	0.331	S. D.	0.000	LOW	0.331	HIGH	0.331
WEIGHT	NUM	1	MEAN	0.681	S. D.	0.000	LOW	0.681	HIGH	0.681

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0000	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.360	0.690	0.560	0.000	0.000	0.000	0.310	3.250	23.13	0.900	0.000	0.220	0.360	0.880	0.690
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.360	0.690	0.560	0.000	0.000	0.000	0.310	3.250	23.13	0.900	0.000	0.220	0.360	0.880	0.690

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- K5 MUSCLE

LENGTH	NUM	12	MEAN	0.360	S. D.	0.044	LOW	0.265	HIGH	0.430
WEIGHT	NUM	12	MEAN	0.894	S. D.	0.268	LOW	0.604	HIGH	1.419

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012
N DET.	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000	0009	0011	0000	0000	0000
MEAN	0.213	0.338	0.052	3.545	0.911	0.030	0.108	0.263	3.24	0.179	0.127	0.190	0.092	0.653	0.453
S. D.	0.123	0.105	0.015	1.520	0.249	0.009	0.033	0.133	0.31	0.058	0.065	0.000	0.010	0.297	0.103
LOW	0.065	0.190	0.030	1.140	0.380	0.010	0.060	0.060	2.81	0.090	0.060	0.000	0.080	0.370	0.265
HIGH	0.490	0.500	0.080	6.450	1.200	0.040	0.135	0.630	3.80	0.265	0.190	0.190	0.110	1.250	0.690

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- K6 MUSCLE

LENGTH	NUM	3	MEAN	0.366	S. D.	0.008	LOW	0.358	HIGH	0.374
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0001	0000	0000	0001	0000	0000	0000	0000	0001	0002	0000	0000	0000
MEAN	0.330	0.390	0.078	3.472	0.743	0.045	0.673	0.824	2.37	0.533	0.145	0.200	0.120	0.747	0.387
S. D.	0.059	0.143	0.004	3.194	0.021	0.007	0.805	1.192	0.24	0.441	0.021	0.000	0.082	0.398	0.050
LOW	0.265	0.225	0.075	1.460	0.720	0.040	0.150	0.105	2.21	0.205	0.130	0.000	0.030	0.410	0.340
HIGH	0.380	0.480	0.080	7.155	0.760	0.050	1.600	2.200	2.64	1.035	0.160	0.200	0.190	1.186	0.440

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- P2 MUSCLE

LENGTH	NUM	4	MEAN	0.279	S. D.	0.030	LOW	0.238	HIGH	0.307
WEIGHT	NUM	4	MEAN	0.531	S. D.	0.000	LOW	0.531	HIGH	0.531

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0001	0000	0000	0003	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.083	0.298	0.060	5.841	0.919	0.060	0.088	0.249	2.50	0.236	1.120	0.620	0.123	1.003	0.431
S. D.	0.036	0.061	0.017	3.902	0.125	0.000	0.018	0.101	0.17	0.132	0.000	0.000	0.036	0.550	0.115
LOW	0.055	0.210	0.040	2.566	0.765	0.000	0.070	0.160	2.30	0.085	0.000	0.000	0.100	0.440	0.340
HIGH	0.135	0.347	0.070	11.186	1.065	0.060	0.110	0.355	2.72	0.380	1.120	0.620	0.175	1.750	0.595

PERCH, OCEAN (REDFISH) SEBASTES MARINUS 131052 AREA- NORTH ATLANTIC SITE- P2 LIVER

LENGTH	NUM	1	MEAN	0.279	S. D.	0.000	LOW	0.279	HIGH	0.279
WEIGHT	NUM	1	MEAN	0.531	S. D.	0.000	LOW	0.531	HIGH	0.531

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.060	0.150	0.055	5.500	0.865	0.285	0.150	3.700	17.32	0.360	0.465	0.000	0.695	1.015	0.600
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.060	0.150	0.055	5.500	0.865	0.285	0.150	3.700	17.32	0.360	0.465	0.000	0.695	1.015	0.600

ROCKFISH, BOCACCIO SEBASTES PAUCISPINIS 131061 AREA- CALIFORNIA SITE- 85 MUSCLE

LENGTH	NUM	10	MEAN	0.600	S. D.	0.064	LOW	0.525	HIGH	0.740
WEIGHT	NUM	10	MEAN	2.650	S. D.	0.948	LOW	1.901	HIGH	4.795

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0002	0000	0000	0003	0000	0001	0000	0001	0009	0010	0001	0003	0000
MEAN	0.270	0.506	0.076	2.012	0.665	0.040	0.267	0.264	3.67	0.237	0.870	0.000	0.123	0.985	0.427
S. D.	0.189	0.272	0.038	1.598	0.265	0.015	0.248	0.047	0.81	0.145	0.000	0.000	0.059	0.504	0.183
LOW	0.040	0.200	0.040	0.430	0.345	0.020	0.060	0.195	2.21	0.070	0.000	0.000	0.040	0.400	0.010
HIGH	0.630	1.130	0.140	5.800	1.230	0.070	0.880	0.320	5.00	0.540	0.870	0.000	0.210	1.950	0.690

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                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   MF17
                                        IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                       BY TISSUE AND LOCATION

 ROCKFISH, BOCACCIO             SEBASTES PAUCISPINIS              131061   AREA- CALIFORNIA           SITE- B5   LIVER

 LENGTH     NUM   1   MEAN       0.610   S. D.     0.000   LOW     0.610   HIGH        0.610
 WEIGHT     NUM   1   MEAN       2.554   S. D.     0.000   LOW     2.554   HIGH        2.554
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER      0001    0001    0001    0001    0000    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
 N DET.      0001    0000    0000    0000    0000    0001    0000    0000    0000    0000    0001    0001    0000    0000    0000
 MEAN       0.000   0.190   0.130   1.750   0.000   0.000   0.190   0.060   32.81   0.080   0.000   0.000   0.530   0.340   0.310
 S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 HIGH       0.000   0.190   0.130   1.750   0.000   0.000   0.190   0.060   32.81   0.080   0.000   0.000   0.530   0.340   0.310

 ROCKFISH, BOCACCIO             SEBASTES PAUCISPINIS              131061   AREA- CALIFORNIA           SITE- F8   MUSCLE

 LENGTH     NUM  10   MEAN       0.606   S. D.     0.059   LOW     0.510   HIGH        0.680
 WEIGHT     NUM  10   MEAN       2.625   S. D.     0.810   LOW     1.500   HIGH        3.750
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER      0009    0010    0010    0009    0008    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010
 N DET.      0000    0000    0001    0000    0000    0001    0000    0000    0000    0000    0006    0006    0001    0001    0000
 MEAN       0.221   0.426   0.066   2.616   0.613   0.037   0.124   0.285    3.73   0.243   0.075   0.228   0.082   0.647   0.582
 S. D.      0.129   0.176   0.015   1.053   0.207   0.014   0.047   0.100    0.72   0.068   0.037   0.108   0.027   0.256   0.116
 LOW        0.100   0.205   0.045   1.440   0.340   0.020   0.060   0.150    2.52   0.156   0.050   0.070   0.050   0.060   0.360
 HIGH       0.510   0.655   0.090   4.613   1.040   0.070   0.190   0.430    4.94   0.360   0.130   0.310   0.120   0.880   0.750

 ROCKFISH, BOCACCIO             SEBASTES PAUCISPINIS              131061   AREA- CALIFORNIA           SITE- F8   LIVER

 LENGTH     NUM   1   MEAN       0.600   S. D.     0.000   LOW     0.600   HIGH        0.600
 WEIGHT     NUM   1   MEAN       2.454   S. D.     0.000   LOW     2.454   HIGH        2.454
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
 N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000
 MEAN       0.096   0.220   0.280   3.066   2.410   0.020   0.220   2.443   48.85   0.176   0.140   0.406   0.690   0.190   0.383
 S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 HIGH       0.096   0.220   0.280   3.066   2.410   0.020   0.220   2.443   48.85   0.176   0.140   0.406   0.690   0.190   0.383

 ROCKFISH, BOCACCIO             SEBASTES PAUCISPINIS              131061   AREA- CALIFORNIA           SITE- I7   MUSCLE

 LENGTH     NUM   4   MEAN       0.450   S. D.     0.013   LOW     0.440   HIGH        0.468
 WEIGHT     NUM   4   MEAN       1.073   S. D.     0.116   LOW     0.900   HIGH        1.150
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER      0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004    0004
 N DET.      0000    0000    0000    0000    0000    0001    0000    0000    0000    0000    0003    0002    0000    0001    0000
 MEAN       0.230   0.593   0.145   2.187   0.914   0.033   0.175   0.328    4.21   0.371   0.100   0.350   0.146   1.348   1.344
 S. D.      0.075   0.167   0.090   1.143   0.382   0.006   0.110   0.080    0.15   0.153   0.000   0.212   0.060   0.655   0.296
 LOW        0.165   0.415   0.040   1.050   0.510   0.030   0.105   0.250    4.10   0.160   0.000   0.200   0.090   0.600   0.900
 HIGH       0.300   0.805   0.250   3.755   1.430   0.040   0.340   0.415    4.41   0.505   0.100   0.500   0.230   1.815   1.500

 ROCKFISH, BOCACCIO             SEBASTES PAUCISPINIS              131061   AREA- CALIFORNIA           SITE- I7   LIVER

 LENGTH     NUM   1   MEAN       0.449   S. D.     0.000   LOW     0.449   HIGH        0.449
 WEIGHT     NUM   1   MEAN       1.072   S. D.     0.000   LOW     1.072   HIGH        1.072
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER      0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
 N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0001    0000    0000    0000
 MEAN       0.100   0.310   0.440   2.000   0.610   0.020   0.060   4.870   20.37   0.190   0.000   0.000   0.690   0.810   0.630
 S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 HIGH       0.100   0.310   0.440   2.000   0.610   0.020   0.060   4.870   20.37   0.190   0.000   0.000   0.690   0.810   0.630

 ROCKFISH, BOCACCIO             SEBASTES PAUCISPINIS              131061   AREA- PACIFIC NORTHWEST   SITE- G9   MUSCLE

 LENGTH     NUM  10   MEAN       0.694   S. D.     0.046   LOW     0.630   HIGH        0.770
 WEIGHT     NUM   8   MEAN       5.049   S. D.     1.176   LOW     3.629   HIGH        6.810
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER      0010    0010    0010    0009    0009    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010
 N DET.      0000    0001    0004    0000    0000    0005    0001    0000    0000    0003    0007    0008    0003    0006    0000
 MEAN       0.333   0.501   0.065   1.817   0.811   0.033   0.289   0.234    3.63   0.190   0.217   0.140   0.076   0.567   0.499
 S. D.      0.123   0.289   0.029   1.008   0.113   0.013   0.162   0.070    0.77   0.111   0.197   0.028   0.031   0.146   0.147
 LOW        0.170   0.206   0.040   0.180   0.640   0.020   0.100   0.160    2.14   0.055   0.070   0.120   0.040   0.403   0.255
 HIGH       0.575   1.100   0.115   3.060   0.985   0.050   0.540   0.380    4.64   0.360   0.440   0.160   0.140   0.755   0.785

 ROCKFISH, BOCACCIO             SEBASTES PAUCISPINIS              131061   AREA- PACIFIC NORTHWEST   SITE- G9   LIVER

 LENGTH     NUM   1   MEAN       0.700   S. D.     0.000   LOW     0.700   HIGH        0.700
 WEIGHT     NUM   1   MEAN       4.990   S. D.     0.000   LOW     4.990   HIGH        4.990
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM      PPM

 NUMBER      0001    0001    0001    0000    0000    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
 N DET.      0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000
 MEAN       0.300   0.250   0.610   0.000   0.000   0.010   0.090   1.780   49.87   0.040   0.220   0.620   0.400   0.560   0.810
 S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
 HIGH       0.300   0.250   0.610   0.000   0.000   0.010   0.090   1.780   49.87   0.040   0.220   0.620   0.400   0.560   0.810
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

ROCKFISH, BOCACCIO SEBASTES PAUCISPINIS 131061 AREA- PACIFIC NORTHWEST SITE- M1 MUSCLE

LENGTH	NUM	3	MEAN	0.677	S. D.	0.085	LOW	0.590	HIGH	0.760
WEIGHT	NUM	3	MEAN	4.612	S. D.	0.916	LOW	3.629	HIGH	5.443

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0003	0000	0000	0002	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.283	0.476	0.000	3.080	0.723	0.040	0.253	0.255	4.37	0.292	0.000	0.000	0.093	0.957	0.360
S. D.	0.228	0.179	0.000	1.250	0.094	0.000	0.017	0.039	0.16	0.068	0.000	0.000	0.051	0.642	0.126
LOW	0.130	0.327	0.000	1.850	0.640	0.000	0.236	0.210	4.19	0.225	0.000	0.000	0.050	0.220	0.215
HIGH	0.545	0.675	0.000	4.350	0.825	0.040	0.270	0.280	4.47	0.360	0.000	0.000	0.150	1.400	0.440

ROCKFISH, BOCACCIO SEBASTES PAUCISPINIS 131061 AREA- PACIFIC NORTHWEST SITE- M8 MUSCLE

LENGTH	NUM	1	MEAN	0.320	S. D.	0.000	LOW	0.320	HIGH	0.320
WEIGHT	NUM	1	MEAN	0.227	S. D.	0.000	LOW	0.227	HIGH	0.227

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.103	0.565	0.110	1.012	0.490	0.100	0.837	0.226	5.54	0.250	0.150	0.000	0.143	1.600	0.500
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.103	0.565	0.110	1.012	0.490	0.100	0.837	0.226	5.54	0.250	0.150	0.000	0.143	1.600	0.500

ROCKFISH, BOCACCIO SEBASTES PAUCISPINIS 131061 AREA- PACIFIC NORTHWEST SITE- R5 MUSCLE

LENGTH	NUM	10	MEAN	0.609	S. D.	0.125	LOW	0.368	HIGH	0.780
WEIGHT	NUM	10	MEAN	2.929	S. D.	1.554	LOW	0.463	HIGH	6.356

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0001	0002	0000	0000	0005	0001	0000	0000	0001	0007	0007	0000	0002	0000
MEAN	0.241	0.318	0.067	1.919	0.493	0.042	0.211	0.395	4.99	0.212	0.137	0.175	0.095	1.096	1.381
S. D.	0.133	0.100	0.047	1.760	0.257	0.011	0.098	0.123	2.31	0.128	0.125	0.097	0.059	0.608	1.132
LOW	0.060	0.200	0.020	0.360	0.100	0.030	0.060	0.250	3.17	0.090	0.050	0.090	0.030	0.450	0.150
HIGH	0.480	0.540	0.145	5.500	0.980	0.060	0.350	0.595	11.07	0.500	0.280	0.280	0.195	2.380	3.720

ROCKFISH, CANARY SEBASTES PINNIGER 131063 AREA- CALIFORNIA SITE- B2 MUSCLE

LENGTH	NUM	10	MEAN	0.540	S. D.	0.043	LOW	0.501	HIGH	0.621
WEIGHT	NUM	10	MEAN	2.570	S. D.	0.617	LOW	1.999	HIGH	3.686

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0009	0009	0009	0010	0010	0009
N DET.	0000	0001	0004	0000	0000	0005	0001	0000	0000	0003	0007	0009	0001	0004	0000
MEAN	0.112	0.403	0.081	2.946	0.975	0.049	0.246	0.301	5.73	0.148	1.015	0.000	0.136	1.058	0.598
S. D.	0.056	0.194	0.056	1.784	0.283	0.020	0.210	0.095	2.95	0.077	0.417	0.000	0.055	0.662	0.173
LOW	0.040	0.270	0.040	0.943	0.500	0.030	0.060	0.190	1.91	0.040	0.720	0.000	0.070	0.190	0.425
HIGH	0.185	0.880	0.180	6.600	1.370	0.070	0.600	0.500	10.71	0.250	1.310	0.000	0.250	1.850	0.980

ROCKFISH, CANARY SEBASTES PINNIGER 131063 AREA- CALIFORNIA SITE- B2 LIVER

LENGTH	NUM	1	MEAN	0.621	S. D.	0.000	LOW	0.621	HIGH	0.621
WEIGHT	NUM	1	MEAN	3.686	S. D.	0.000	LOW	3.686	HIGH	3.686

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.120	1.130	2.200	0.000	1.770	0.000	0.310	1.880	31.87	0.130	0.000	1.210	0.750	1.000	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.120	1.130	2.200	0.000	1.770	0.000	0.310	1.880	31.87	0.130	0.000	1.210	0.750	1.000	0.380

ROCKFISH, CANARY SEBASTES PINNIGER 131063 AREA- PACIFIC NORTHWEST SITE- G9 MUSCLE

LENGTH	NUM	7	MEAN	0.505	S. D.	0.071	LOW	0.440	HIGH	0.650
WEIGHT	NUM	6	MEAN	2.226	S. D.	0.791	LOW	1.701	HIGH	3.629

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0000	0001	0002	0000	0000	0003	0000	0000	0000	0002	0005	0005	0001	0003	0000
MEAN	0.060	0.263	0.042	2.633	0.972	0.033	0.211	0.314	4.46	0.290	0.245	0.350	0.085	0.556	0.488
S. D.	0.024	0.053	0.009	1.018	0.249	0.010	0.252	0.097	0.56	0.051	0.092	0.127	0.029	0.270	0.133
LOW	0.030	0.190	0.030	1.925	0.605	0.020	0.050	0.140	3.39	0.220	0.180	0.260	0.045	0.350	0.340
HIGH	0.095	0.350	0.055	4.825	1.400	0.040	0.750	0.430	5.16	0.360	0.310	0.440	0.125	0.945	0.670

ROCKFISH, CANARY SEBASTES PINNIGER 131063 AREA- PACIFIC NORTHWEST SITE- G9 LIVER

LENGTH	NUM	1	MEAN	0.477	S. D.	0.000	LOW	0.477	HIGH	0.477
WEIGHT	NUM	1	MEAN	2.070	S. D.	0.000	LOW	2.070	HIGH	2.070

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

ROCKFISH, CANARY SEBASTES PINNIGER 131063 AREA- PACIFIC NORTHWEST SITE- M2 MUSCLE

ENGTH	NUM	9	MEAN	0.373	S. D.	0.095	LOW	0.290	HIGH	0.570
EIGHT	NUM	1	MEAN	2.495	S. D.	0.000	LOW	2.495	HIGH	2.495

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0008	0008	0008	0009	0009	0009	0009	0009	0009	0009	0008	0009	0009
DET.	0000	0001	0003	0000	0000	0006	0001	0000	0000	0002	0005	0005	0000	0003	0000
EAN	0.178	0.310	0.045	2.842	0.745	0.037	0.257	0.323	5.80	0.233	0.215	0.365	0.184	1.150	0.579
. D.	0.193	0.082	0.014	1.825	0.465	0.012	0.198	0.225	5.45	0.088	0.155	0.108	0.108	0.744	0.153
LOW	0.050	0.200	0.035	0.965	0.290	0.030	0.100	0.105	2.50	0.110	0.090	0.260	0.070	0.440	0.450
HIGH	0.660	0.420	0.070	6.000	1.780	0.050	0.700	0.830	19.90	0.360	0.440	0.500	0.360	2.200	0.930

ROCKFISH, CANARY SEBASTES PINNIGER 131063 AREA- PACIFIC NORTHWEST SITE- M5 MUSCLE

LENGTH	NUM	4	MEAN	0.510	S. D.	0.028	LOW	0.485	HIGH	0.550
WEIGHT	NUM	3	MEAN	2.495	S. D.	0.393	LOW	2.268	HIGH	2.948

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0001	0000	0000	0004	0001	0000	0000	0001	0004	0003	0000	0002	0000
MEAN	0.171	0.289	0.097	2.830	0.849	0.000	0.123	0.300	4.09	0.300	0.000	0.100	0.121	0.330	0.420
S. D.	0.165	0.060	0.051	1.274	0.057	0.000	0.018	0.043	0.86	0.147	0.000	0.000	0.017	0.028	0.218
LOW	0.060	0.230	0.040	0.960	0.795	0.000	0.105	0.275	3.20	0.185	0.000	0.000	0.110	0.310	0.190
HIGH	0.415	0.360	0.140	3.800	0.930	0.000	0.140	0.365	5.19	0.465	0.000	0.100	0.145	0.350	0.700

ROCKFISH, CANARY SEBASTES PINNIGER 131063 AREA- PACIFIC NORTHWEST SITE- M8 MUSCLE

LENGTH	NUM	4	MEAN	0.496	S. D.	0.066	LOW	0.415	HIGH	0.550
WEIGHT	NUM	4	MEAN	2.325	S. D.	0.876	LOW	1.361	HIGH	3.175

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0003	0003	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0002	0000	0000	0002	0000	0000	0000	0000	0003	0003	0000	0001	0000
MEAN	0.183	0.693	0.073	3.290	0.860	0.025	0.326	0.263	3.42	0.230	0.150	0.500	0.094	0.937	0.975
S. D.	0.061	0.150	0.053	1.666	0.162	0.007	0.131	0.070	0.34	0.208	0.000	0.000	0.047	0.115	0.833
LOW	0.130	0.515	0.035	1.390	0.680	0.020	0.130	0.195	3.15	0.030	0.000	0.000	0.040	0.820	0.550
HIGH	0.240	0.875	0.110	4.500	0.995	0.030	0.406	0.360	3.89	0.500	0.150	0.500	0.140	1.050	2.225

ROCKFISH, CANARY SEBASTES PINNIGER 131063 AREA- PACIFIC NORTHWEST SITE- R2 MUSCLE

LENGTH	NUM	3	MEAN	0.551	S. D.	0.049	LOW	0.498	HIGH	0.594
WEIGHT	NUM	3	MEAN	2.722	S. D.	0.908	LOW	1.814	HIGH	3.629

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.163	1.007	0.153	4.088	0.787	0.045	0.279	0.557	4.71	0.395	0.195	0.325	0.243	1.463	2.877
S. D.	0.108	0.113	0.080	1.998	0.111	0.009	0.164	0.133	0.39	0.206	0.163	0.091	0.060	0.371	1.299
LOW	0.040	0.877	0.070	2.675	0.670	0.040	0.105	0.480	4.28	0.180	0.075	0.220	0.180	1.200	1.500
HIGH	0.240	1.075	0.230	5.500	0.890	0.055	0.430	0.710	5.04	0.590	0.380	0.380	0.300	1.725	4.080

ROCKFISH, CANARY SEBASTES PINNIGER 131063 AREA- PACIFIC NORTHWEST SITE- R5 MUSCLE

LENGTH	NUM	7	MEAN	0.523	S. D.	0.045	LOW	0.493	HIGH	0.619
WEIGHT	NUM	7	MEAN	2.349	S. D.	0.637	LOW	1.814	HIGH	3.629

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0001	0000	0001	0000	0000	0002	0000	0000	0000	0002	0002	0004	0001	0002	0000
MEAN	0.140	0.885	0.168	3.378	0.768	0.076	0.169	0.359	5.18	0.263	0.220	0.363	0.195	1.456	3.733
S. D.	0.133	0.617	0.105	2.183	0.319	0.036	0.107	0.119	1.31	0.192	0.154	0.123	0.101	0.372	2.241
LOW	0.040	0.350	0.070	1.840	0.435	0.020	0.040	0.180	2.86	0.050	0.080	0.260	0.075	1.070	2.080
HIGH	0.400	2.120	0.350	7.600	1.320	0.110	0.375	0.495	7.19	0.530	0.440	0.500	0.360	1.870	8.670

SCULPIN, LONGHORN MYOXOCEPHALUS OCTODECEMSPINOSUS 132031 AREA- NORTH ATLANTIC SITE- N3 MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.330	0.250	0.060	2.500	1.040	0.020	0.160	0.210	4.38	0.910	0.000	0.000	0.260	0.000	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.330	0.250	0.060	2.500	1.040	0.020	0.160	0.210	4.38	0.910	0.000	0.000	0.260	0.000	0.380

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- J5 MUSCLE

LENGTH	NUM	3	MEAN	0.229	S. D.	0.027	LOW	0.198	HIGH	0.244
WEIGHT	NUM	3	MEAN	0.106	S. D.	0.030	LOW	0.084	HIGH	0.140

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0003	0002	0000	0001	0000
MEAN	0.240	0.651	0.097	4.844	0.625	0.040	0.220	0.375	5.33	0.450	0.000	0.130	0.287	1.535	0.493
S. D.	0.185	0.312	0.023	0.375	0.137	0.014	0.147	0.084	2.99	0.296	0.000	0.000	0.084	0.403	0.198
LOW	0.060	0.320	0.070	4.416	0.470	0.030	0.060	0.285	3.21	0.250	0.000	0.000	0.195	1.250	0.305
HIGH	0.430	0.940	0.110	5.116	0.730	0.050	0.350	0.450	8.75	0.790	0.000	0.130	0.360	1.820	0.700

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- M9 MUSCLE

LENGTH NUM 5 MEAN 0.229 S. D. 0.012 LOW 0.215 HIGH 0.247
WEIGHT NUM 5 MEAN 0.142 S. D. 0.013 LOW 0.127 HIGH 0.158

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0005	0000
MEAN	0.356	0.708	0.091	2.181	0.523	0.052	0.400	0.349	4.36	0.324	0.177	0.230	0.351	0.000	0.646
S. D.	0.059	0.319	0.033	0.604	0.093	0.016	0.268	0.071	0.81	0.057	0.045	0.075	0.090	0.000	0.123
LOW	0.280	0.380	0.060	1.300	0.430	0.030	0.130	0.240	3.44	0.280	0.130	0.160	0.260	0.000	0.470
HIGH	0.420	1.190	0.140	2.765	0.680	0.070	0.810	0.435	5.44	0.420	0.220	0.310	0.450	0.000	0.810

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- N1 MUSCLE

LENGTH NUM 1 MEAN 0.250 S. D. 0.000 LOW 0.250 HIGH 0.250
WEIGHT NUM 1 MEAN 0.175 S. D. 0.000 LOW 0.175 HIGH 0.175

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.150	0.630	0.080	2.950	0.280	0.040	0.250	0.180	4.06	0.290	0.000	0.000	0.280	0.000	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.150	0.630	0.080	2.950	0.280	0.040	0.250	0.180	4.06	0.290	0.000	0.000	0.280	0.000	0.630

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- N2 MUSCLE

LENGTH NUM 2 MEAN 0.245 S. D. 0.043 LOW 0.214 HIGH 0.275
WEIGHT NUM 2 MEAN 0.209 S. D. 0.044 LOW 0.178 HIGH 0.240

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0002	0000
MEAN	0.125	0.393	0.075	0.738	0.515	0.058	0.190	0.513	4.92	0.298	0.000	0.000	0.160	0.000	0.493
S. D.	0.035	0.018	0.007	0.081	0.247	0.004	0.000	0.032	0.47	0.046	0.000	0.000	0.042	0.000	0.053
LOW	0.100	0.380	0.070	0.680	0.340	0.055	0.190	0.490	4.59	0.265	0.000	0.000	0.130	0.000	0.455
HIGH	0.150	0.405	0.080	0.795	0.690	0.060	0.190	0.535	5.25	0.330	0.000	0.000	0.190	0.000	0.530

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- N4 MUSCLE

LENGTH NUM 5 MEAN 0.250 S. D. 0.013 LOW 0.228 HIGH 0.262
WEIGHT NUM 5 MEAN 0.176 S. D. 0.026 LOW 0.133 HIGH 0.203

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0005	0005	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0005	0004	0000	0002	0000
MEAN	0.225	0.500	0.064	6.203	0.516	0.039	0.185	0.416	4.01	0.206	0.000	0.130	0.226	0.947	0.584
S. D.	0.105	0.112	0.027	3.871	0.159	0.002	0.124	0.230	1.29	0.101	0.000	0.000	0.080	0.185	0.197
LOW	0.090	0.400	0.020	2.400	0.310	0.035	0.060	0.140	1.81	0.040	0.000	0.000	0.160	0.830	0.310
HIGH	0.330	0.690	0.090	10.600	0.700	0.040	0.315	0.680	5.00	0.300	0.000	0.130	0.340	1.160	0.810

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- N5 MUSCLE

LENGTH NUM 1 MEAN 0.214 S. D. 0.000 LOW 0.214 HIGH 0.214
WEIGHT NUM 1 MEAN 0.132 S. D. 0.000 LOW 0.132 HIGH 0.132

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.225	0.405	0.080	2.600	0.295	0.040	0.190	0.350	4.06	0.215	0.000	0.000	0.170	0.000	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.225	0.405	0.080	2.600	0.295	0.040	0.190	0.350	4.06	0.215	0.000	0.000	0.170	0.000	0.630

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- N7 MUSCLE

LENGTH NUM 14 MEAN 0.202 S. D. 0.035 LOW 0.138 HIGH 0.252
WEIGHT NUM 14 MEAN 0.115 S. D. 0.042 LOW 0.046 HIGH 0.193

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0014	0014	0014	0014	0014	0013	0013	0014	0014	0014	0014	0014	0014	0014	0014
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0013	0010	0000	0008	0000
MEAN	0.262	0.578	0.085	3.374	0.455	0.043	0.197	0.474	4.20	0.253	0.170	0.255	0.235	0.775	0.628
S. D.	0.139	0.254	0.028	2.421	0.194	0.013	0.095	0.247	1.04	0.074	0.000	0.095	0.074	0.286	0.213
LOW	0.040	0.190	0.040	0.730	0.090	0.025	0.040	0.220	1.75	0.080	0.000	0.160	0.170	0.310	0.440
HIGH	0.510	1.000	0.140	8.600	0.805	0.070	0.375	1.040	5.94	0.390	0.170	0.360	0.410	1.060	1.220

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- N8 MUSCLE

LENGTH NUM 4 MEAN 0.214 S. D. 0.057 LOW 0.148 HIGH 0.282
WEIGHT NUM 4 MEAN 0.129 S. D. 0.115 LOW 0.035 HIGH 0.295

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0003	0003	0004	0004	0004	0003	0003	0004	0004	0004	0004	0003
N DET.	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0004	0002	0000	0004	0000
MEAN	0.205	0.524	0.095	0.775	0.252	0.055	0.188	0.339	4.41	0.357	0.000	0.250	0.204	0.000	0.498
S. D.	0.108	0.206	0.022	0.172	0.155	0.017	0.084	0.123	0.40	0.038	0.000	0.000	0.064	0.000	0.137
LOW	0.100	0.250	0.080	0.645	0.090	0.040	0.120	0.160	3.97	0.330	0.000	0.250	0.110	0.000	0.400
HIGH	0.330	0.750	0.120	0.970	0.400	0.070	0.305	0.440	4.75	0.400	0.000	0.250	0.255	0.000	0.655

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- 02 MUSCLE

LENGTH NUM 14 MEAN 0.254 S. D. 0.019 LOW 0.217 HIGH 0.287
WEIGHT NUM 14 MEAN 0.188 S. D. 0.043 LOW 0.100 HIGH 0.254

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0014	0012	0014	0014	0014	0014	0013	0014	0013	0014	0014	0014	0014	0014	0014
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0012	0013	0000	0007	0000
MEAN	0.115	0.354	0.079	1.529	0.390	0.048	0.206	0.469	4.68	0.242	0.170	0.480	0.151	0.843	0.651
S. D.	0.052	0.112	0.039	0.665	0.238	0.014	0.093	0.161	0.89	0.087	0.113	0.000	0.043	0.242	0.250
LOW	0.040	0.190	0.040	0.840	0.080	0.020	0.060	0.250	2.69	0.080	0.090	0.000	0.090	0.380	0.380
HIGH	0.220	0.565	0.190	3.350	1.100	0.080	0.345	0.750	5.75	0.380	0.250	0.480	0.220	1.130	1.220

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- 03 MUSCLE

LENGTH NUM 2 MEAN 0.286 S. D. 0.030 LOW 0.265 HIGH 0.307
WEIGHT NUM 2 MEAN 0.226 S. D. 0.057 LOW 0.185 HIGH 0.266

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.110	0.518	0.060	1.763	0.443	0.033	0.128	0.310	4.97	0.255	0.000	0.040	0.160	0.625	0.515
S. D.	0.028	0.159	0.028	1.290	0.173	0.004	0.046	0.269	1.20	0.092	0.000	0.000	0.057	0.262	0.064
LOW	0.090	0.405	0.040	0.850	0.320	0.030	0.095	0.120	4.12	0.190	0.000	0.000	0.120	0.440	0.470
HIGH	0.130	0.630	0.080	2.675	0.565	0.035	0.160	0.500	5.81	0.320	0.000	0.040	0.200	0.810	0.560

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- R3 MUSCLE

LENGTH NUM 5 MEAN 0.194 S. D. 0.045 LOW 0.147 HIGH 0.245
WEIGHT NUM 5 MEAN 0.092 S. D. 0.056 LOW 0.038 HIGH 0.164

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0004	0002	0000	0005	0000
MEAN	0.175	0.688	0.089	2.316	0.428	0.055	0.226	0.249	5.46	0.326	0.060	0.180	0.233	0.000	0.678
S. D.	0.105	0.194	0.016	1.602	0.166	0.020	0.068	0.103	1.12	0.073	0.000	0.017	0.059	0.000	0.131
LOW	0.060	0.470	0.070	0.890	0.245	0.030	0.155	0.080	4.37	0.215	0.000	0.160	0.170	0.000	0.530
HIGH	0.290	0.910	0.110	4.725	0.670	0.080	0.310	0.360	7.00	0.390	0.060	0.190	0.330	0.000	0.860

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- R6 MUSCLE

LENGTH NUM 6 MEAN 0.195 S. D. 0.041 LOW 0.132 HIGH 0.239
WEIGHT NUM 6 MEAN 0.092 S. D. 0.044 LOW 0.035 HIGH 0.147

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0005	0000	0004	0000
MEAN	0.095	0.751	0.085	2.181	0.537	0.052	0.251	0.464	4.88	0.288	0.280	0.175	0.193	0.530	0.640
S. D.	0.034	0.538	0.020	0.933	0.118	0.013	0.111	0.170	0.59	0.077	0.000	0.000	0.025	0.580	0.194
LOW	0.050	0.410	0.060	1.150	0.350	0.030	0.140	0.285	3.97	0.190	0.000	0.000	0.170	0.120	0.470
HIGH	0.130	1.810	0.110	3.866	0.685	0.065	0.440	0.740	5.50	0.420	0.280	0.175	0.230	0.940	1.000

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- R9 MUSCLE

LENGTH NUM 2 MEAN 0.230 S. D. 0.006 LOW 0.226 HIGH 0.234
WEIGHT NUM 2 MEAN 0.136 S. D. 0.016 LOW 0.124 HIGH 0.147

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0002	0000
MEAN	0.138	1.095	0.130	1.804	0.398	0.040	0.315	0.555	4.77	0.273	0.000	0.000	0.170	0.000	0.570
S. D.	0.025	1.011	0.057	0.525	0.145	0.014	0.134	0.000	0.42	0.060	0.000	0.000	0.014	0.000	0.007
LOW	0.120	0.380	0.090	1.433	0.295	0.030	0.220	0.555	4.47	0.230	0.000	0.000	0.160	0.000	0.565
HIGH	0.155	1.810	0.170	2.175	0.500	0.050	0.410	0.555	5.06	0.315	0.000	0.000	0.180	0.000	0.575

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- NORTH ATLANTIC SITE- S1 MUSCLE

LENGTH NUM 3 MEAN 0.225 S. D. 0.027 LOW 0.196 HIGH 0.249
WEIGHT NUM 3 MEAN 0.113 S. D. 0.049 LOW 0.062 HIGH 0.159

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0003	0000
MEAN	0.255	0.352	0.078	1.617	0.622	0.048	0.197	0.333	4.57	0.305	0.000	0.000	0.203	0.000	0.440
S. D.	0.172	0.036	0.008	0.785	0.155	0.026	0.080	0.059	0.09	0.065	0.000	0.000	0.051	0.000	0.079
LOW	0.100	0.310	0.070	1.000	0.450	0.020	0.120	0.290	4.50	0.230	0.000	0.000	0.160	0.000	0.380
HIGH	0.440	0.375	0.085	2.500	0.750	0.070	0.280	0.400	4.63	0.345	0.000	0.000	0.260	0.000	0.530

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- SOUTH ATLANTIC SITE- B6 MUSCLE

LENGTH NUM 1 MEAN 0.193 S. D. 0.000 LOW 0.193 HIGH 0.193
WEIGHT NUM 1 MEAN 0.062 S. D. 0.000 LOW 0.062 HIGH 0.062

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.105	0.413	0.040	20.383	0.900	0.100	0.150	0.230	4.71	0.605	0.000	0.000	0.410	1.570	0.625
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.105	0.413	0.040	20.383	0.900	0.100	0.150	0.230	4.71	0.605	0.000	0.000	0.410	1.570	0.625

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SEAROBIN, NORTHERN PRIONOTUS CAROLINUS 135010 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH	NUM	10	MEAN	0.195	S. D.	0.005	LOW	0.185	HIGH	0.198
WEIGHT	NUM	10	MEAN	0.056	S. D.	0.005	LOW	0.054	HIGH	0.068

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0002	0000	0000	0000
MEAN	0.060	0.623	0.076	3.526	0.648	0.047	0.227	0.387	3.71	0.231	0.182	0.169	0.414	0.887	0.732
S. D.	0.039	0.254	0.040	1.435	0.361	0.017	0.098	0.134	0.79	0.038	0.136	0.088	0.134	0.274	0.200
LOW	0.020	0.310	0.040	1.490	0.170	0.020	0.070	0.190	2.06	0.175	0.060	0.060	0.260	0.310	0.440
HIGH	0.140	1.060	0.170	6.353	1.200	0.075	0.405	0.640	4.68	0.290	0.380	0.310	0.665	1.190	1.095

SEAROBIN, STRIPED PRIONOTUS EVOLANS 135011 AREA- NORTH ATLANTIC SITE- R9 MUSCLE

LENGTH	NUM	10	MEAN	0.192	S. D.	0.000	LOW	0.192	HIGH	0.192
WEIGHT	NUM	10	MEAN	0.113	S. D.	0.000	LOW	0.113	HIGH	0.113

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0010	0007	0000	0001	0000
MEAN	0.052	0.602	0.062	3.187	0.546	0.041	0.100	0.523	5.37	0.220	0.000	0.250	0.292	0.616	0.546
S. D.	0.030	0.291	0.017	1.027	0.188	0.014	0.037	0.151	0.64	0.054	0.000	0.060	0.073	0.141	0.089
LOW	0.020	0.310	0.040	1.100	0.250	0.030	0.060	0.373	4.53	0.130	0.000	0.190	0.210	0.440	0.380
HIGH	0.105	1.200	0.085	4.425	0.910	0.075	0.155	0.760	6.69	0.310	0.000	0.310	0.430	0.880	0.690

DOGFISH, SPINY SQUALUS ACANTHIAS 141007 AREA- NORTH ATLANTIC SITE- I5 MUSCLE

LENGTH	NUM	4	MEAN	0.745	S. D.	0.026	LOW	0.720	HIGH	0.780
WEIGHT	NUM	4	MEAN	1.486	S. D.	0.269	LOW	1.178	HIGH	1.814

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0001	0001	0000	0000	0000	0000	0001	0003	0000	0001	0000
MEAN	0.223	0.695	0.093	5.219	0.452	0.333	0.148	0.486	5.13	0.245	0.057	0.500	0.196	0.690	0.449
S. D.	0.052	0.586	0.017	2.605	0.016	0.508	0.104	0.129	2.40	0.132	0.006	0.000	0.052	0.123	0.199
LOW	0.190	0.265	0.070	2.700	0.440	0.040	0.040	0.380	3.13	0.140	0.050	0.000	0.140	0.565	0.255
HIGH	0.300	1.560	0.110	8.875	0.470	0.920	0.260	0.655	8.57	0.430	0.060	0.500	0.250	0.810	0.630

DOGFISH, SPINY SQUALUS ACANTHIAS 141007 AREA- NORTH ATLANTIC SITE- I5 LIVER

LENGTH	NUM	3	MEAN	0.742	S. D.	0.019	LOW	0.720	HIGH	0.755
WEIGHT	NUM	3	MEAN	1.447	S. D.	0.234	LOW	1.178	HIGH	1.602

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0003	0000	0000	0000	0000	0001	0001	0000	0000	0000	0000	0002	0000	0001	0000
MEAN	0.000	0.330	0.587	8.250	0.220	0.040	0.138	2.733	4.64	0.133	0.413	0.090	0.417	0.720	0.417
S. D.	0.000	0.286	0.732	2.257	0.125	0.042	0.011	4.035	3.26	0.060	0.397	0.000	0.150	0.127	0.188
LOW	0.000	0.060	0.110	5.900	0.120	0.010	0.130	0.110	1.43	0.070	0.150	0.000	0.250	0.630	0.250
HIGH	0.000	0.630	1.430	10.400	0.360	0.070	0.145	7.380	7.94	0.190	0.870	0.090	0.540	0.810	0.620

DOGFISH, SPINY SQUALUS ACANTHIAS 141007 AREA- NORTH ATLANTIC SITE- J6 MUSCLE

LENGTH	NUM	12	MEAN	0.724	S. D.	0.229	LOW	0.314	HIGH	0.940
WEIGHT	NUM	3	MEAN	0.238	S. D.	0.111	LOW	0.140	HIGH	0.358

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013
N DET.	0000	0000	0001	0000	0000	0004	0000	0000	0000	0000	0008	0011	0000	0002	0000
MEAN	0.216	0.370	0.056	5.500	0.376	0.028	0.143	0.308	3.17	0.197	0.080	0.345	0.155	0.578	0.454
S. D.	0.152	0.176	0.015	2.256	0.247	0.015	0.133	0.135	1.14	0.135	0.046	0.403	0.139	0.327	0.154
LOW	0.015	0.190	0.030	1.765	0.060	0.010	0.040	0.080	1.88	0.090	0.030	0.060	0.060	0.215	0.220
HIGH	0.540	0.750	0.080	8.850	0.900	0.060	0.530	0.640	5.71	0.610	0.150	0.630	0.570	1.495	0.780

DOGFISH, SPINY SQUALUS ACANTHIAS 141007 AREA- NORTH ATLANTIC SITE- J6 LIVER

LENGTH	NUM	11	MEAN	0.704	S. D.	0.229	LOW	0.314	HIGH	0.910
WEIGHT	NUM	7	MEAN	0.531	S. D.	0.286	LOW	0.140	HIGH	0.822

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0012	0012	0012	0011	0012	0011	0012	0012	0012	0012	0011
N DET.	0008	0000	0001	0000	0000	0003	0002	0000	0000	0000	0007	0011	0000	0003	0002
MEAN	0.118	0.317	0.331	8.599	0.850	0.042	0.099	1.711	4.63	0.185	0.144	0.130	0.340	0.552	0.338
S. D.	0.124	0.306	0.272	4.666	0.298	0.031	0.043	0.856	2.35	0.204	0.052	0.000	0.123	0.351	0.215
LOW	0.040	0.060	0.140	4.233	0.320	0.010	0.060	0.760	1.31	0.030	0.060	0.000	0.140	0.190	0.130
HIGH	0.300	1.130	1.100	19.975	1.330	0.110	0.190	3.500	8.88	0.730	0.190	0.130	0.530	1.340	0.750

DOGFISH, SPINY SQUALUS ACANTHIAS 141007 AREA- NORTH ATLANTIC SITE- J7 MUSCLE

LENGTH	NUM	7	MEAN	0.883	S. D.	0.051	LOW	0.830	HIGH	0.960
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000	0007	0007	0000	0001	0000
MEAN	0.464	0.462	0.060	4.617	0.334	0.029	0.147	0.301	3.11	0.142	0.000	0.000	0.079	0.523	0.485
S. D.	0.267	0.200	0.033	1.197	0.122	0.012	0.131	0.113	0.55	0.046	0.000	0.000	0.022	0.220	0.190
LOW	0.170	0.190	0.035	2.975	0.130	0.020	0.055	0.145	2.37	0.070	0.000	0.000	0.060	0.280	0.310
HIGH	0.940	0.750	0.130	6.536	0.550	0.050	0.405	0.460	3.94	0.195	0.000	0.000	0.120	0.810	0.840

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

DOGFISH, SPINY   SQUALUS ACANTHIAS   141007   AREA- NORTH ATLANTIC   SITE- J7   LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	3	0.886	0.047	0.855	0.940
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0001	0001
MEAN	0.190	0.267	0.437	8.242	0.757	0.033	0.060	1.107	5.02	0.130	0.185	0.190	0.290	0.315	0.335
S. D.	0.000	0.131	0.206	0.601	0.093	0.012	0.000	0.565	0.72	0.036	0.092	0.000	0.044	0.092	0.035
LOW	0.000	0.120	0.280	7.625	0.680	0.020	0.060	0.690	4.19	0.100	0.120	0.000	0.260	0.250	0.310
HIGH	0.190	0.370	0.670	8.825	0.860	0.040	0.060	1.750	5.50	0.170	0.250	0.190	0.340	0.380	0.360

DOGFISH, SPINY   SQUALUS ACANTHIAS   141007   AREA- NORTH ATLANTIC   SITE- N2   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	6	0.865	0.054	0.780	0.930
WEIGHT	6	3.594	0.616	2.951	4.540

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0005	0005	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000	0006	0005	0000	0000	0000
MEAN	0.478	0.352	0.048	9.580	0.436	0.025	0.136	0.225	4.24	0.105	0.000	0.190	0.112	0.413	0.750
S. D.	0.236	0.120	0.012	2.880	0.126	0.017	0.139	0.122	0.60	0.042	0.000	0.000	0.008	0.083	0.313
LOW	0.160	0.230	0.030	6.825	0.250	0.010	0.060	0.060	3.38	0.060	0.000	0.000	0.100	0.310	0.370
HIGH	0.840	0.500	0.060	14.450	0.570	0.040	0.380	0.390	5.00	0.180	0.000	0.190	0.120	0.500	1.190

DOGFISH, SPINY   SQUALUS ACANTHIAS   141007   AREA- NORTH ATLANTIC   SITE- N4   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	2	0.855	0.007	0.850	0.860
WEIGHT	2	4.313	1.605	3.178	5.448

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.395	0.380	0.045	9.263	0.510	0.010	0.190	0.175	2.97	0.070	0.000	0.000	0.085	0.280	0.330
S. D.	0.148	0.354	0.007	1.008	0.127	0.000	0.000	0.049	1.18	0.085	0.000	0.000	0.064	0.042	0.198
LOW	0.290	0.130	0.040	8.550	0.420	0.000	0.000	0.140	2.13	0.010	0.000	0.000	0.040	0.250	0.190
HIGH	0.500	0.630	0.050	9.975	0.600	0.010	0.190	0.210	3.80	0.130	0.000	0.000	0.130	0.310	0.470

DOGFISH, SPINY   SQUALUS ACANTHIAS   141007   AREA- NORTH ATLANTIC   SITE- N7   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	12	0.753	0.050	0.680	0.890
WEIGHT	12	1.565	0.426	1.258	2.880

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0012	0012	0012	0011	0012	0012	0012	0012	0012	0012	0012
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0006	0007	0000	0000	0000
MEAN	0.311	0.602	0.067	5.390	0.786	0.033	0.187	0.392	3.68	0.279	0.163	0.794	0.120	0.574	0.573
S. D.	0.151	0.127	0.026	2.114	1.383	0.009	0.118	0.142	0.61	0.388	0.044	0.211	0.039	0.284	0.128
LOW	0.155	0.470	0.040	2.318	0.195	0.020	0.075	0.160	2.50	0.070	0.090	0.630	0.060	0.215	0.420
HIGH	0.680	0.815	0.120	10.140	5.146	0.050	0.465	0.550	4.31	1.500	0.190	1.110	0.186	1.000	0.870

DOGFISH, SPINY   SQUALUS ACANTHIAS   141007   AREA- NORTH ATLANTIC   SITE- N8   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	11	0.810	0.090	0.663	0.920
WEIGHT	11	2.212	0.867	1.003	3.689

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0010	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0008	0009	0000	0000	0000
MEAN	0.424	0.423	0.068	6.714	0.463	0.033	0.251	0.330	3.55	0.177	0.147	0.220	0.101	0.651	0.647
S. D.	0.137	0.158	0.021	1.693	0.152	0.013	0.199	0.086	0.45	0.045	0.075	0.127	0.036	0.181	0.222
LOW	0.230	0.190	0.040	3.275	0.150	0.015	0.075	0.205	2.90	0.115	0.060	0.130	0.060	0.345	0.380
HIGH	0.650	0.750	0.115	9.693	0.680	0.050	0.630	0.440	4.37	0.270	0.190	0.310	0.170	0.970	1.100

DOGFISH, SPINY   SQUALUS ACANTHIAS   141007   AREA- NORTH ATLANTIC   SITE- O3   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	9	0.751	0.153	0.398	0.910
WEIGHT	9	1.806	0.964	0.222	3.348

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0004	0000	0000	0000
MEAN	0.296	0.450	0.065	6.796	0.392	0.037	0.191	0.347	3.42	0.201	0.195	0.440	0.137	0.649	0.548
S. D.	0.182	0.232	0.021	1.633	0.120	0.016	0.123	0.081	0.96	0.046	0.090	0.179	0.066	0.141	0.209
LOW	0.040	0.215	0.035	4.900	0.190	0.020	0.060	0.190	2.25	0.110	0.090	0.250	0.085	0.440	0.310
HIGH	0.575	0.940	0.110	10.350	0.620	0.070	0.430	0.450	4.94	0.250	0.310	0.630	0.310	0.900	0.940

DOGFISH, SPINY   SQUALUS ACANTHIAS   141007   AREA- SOUTH ATLANTIC   SITE- D2   MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	1	0.280	0.000	0.280	0.280
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.160	0.810	0.260	4.225	0.450	0.040	0.060	0.370	3.56	0.110	0.000	0.000	0.090	0.810	0.720
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.160	0.810	0.260	4.225	0.450	0.040	0.060	0.370	3.56	0.110	0.000	0.000	0.090	0.810	0.720

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                                         TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                        REPORT   MF
                                         IN RESOURCE SURVEY SPECIES:
LOCATION LEVEL 5                         BY TISSUE AND LOCATION

 DOGFISH, SPINY                   SQUALUS ACANTHIAS                        141007   AREA- SOUTH ATLANTIC      SITE- D2   LIVER

LENGTH     NUM    1   MEAN        0.280   S. D.       0.000   LOW        0.280   HIGH         0.280
WEIGHT     NUM    0   MEAN        0.000   S. D.       0.000   LOW        0.000   HIGH         0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001     0001    0001    0001      0001    0001    0001    0001     0001
N DET.     0001    0000    0000    0000    0000    0000    0000     0000    0000    0000      0001    0001    0000    0000     0000
MEAN      0.000   0.535   0.890   6.340   1.250   0.040   0.130    1.850    7.41   0.245     0.000   0.000   0.670   0.370    0.400
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000    0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000    0.000
HIGH      0.000   0.535   0.890   6.340   1.250   0.040   0.130    1.850    7.41   0.245     0.000   0.000   0.670   0.370    0.400

 DOGFISH, SPINY                   SQUALUS ACANTHIAS                        141007   AREA- PACIFIC NORTHWEST   SITE- H7   MUSCLE

LENGTH     NUM   10   MEAN        0.815   S. D.       0.000   LOW        0.815   HIGH         0.815
WEIGHT     NUM    0   MEAN        0.000   S. D.       0.000   LOW        0.000   HIGH         0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0010    0010    0010    0009    0009    0010    0010     0010    0010    0010      0010    0010    0010    0010     0009
N DET.     0000    0002    0004    0000    0001    0005    0001     0000    0000    0002      0009    0009    0000    0005     0000
MEAN      0.372   0.508   0.077   4.696   0.286   0.025   0.265    0.322    2.63   0.237     0.270   0.100   0.143   0.555    1.013
S. D.     0.123   0.267   0.053   2.036   0.151   0.014   0.223    0.092    0.45   0.167     0.000   0.000   0.130   0.282    0.533
LOW       0.230   0.190   0.040   1.650   0.050   0.010   0.076    0.210    2.00   0.110     0.000   0.000   0.060   0.190    0.235
HIGH      0.640   0.880   0.180   7.920   0.500   0.040   0.750    0.540    3.28   0.570     0.270   0.100   0.500   0.863    2.000

 DOGFISH, SPINY                   SQUALUS ACANTHIAS                        141007   AREA- PACIFIC NORTHWEST   SITE- H8   MUSCLE

LENGTH     NUM   10   MEAN        0.830   S. D.       0.000   LOW        0.830   HIGH         0.830
WEIGHT     NUM    0   MEAN        0.000   S. D.       0.000   LOW        0.000   HIGH         0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0010    0009    0010    0009    0009    0010    0010     0010    0010    0010      0010    0010    0010    0010     0009
N DET.     0000    0000    0000    0000    0001    0001    0000     0000    0000    0000      0005    0007    0000    0001     0000
MEAN      0.344   0.432   0.079   7.013   0.557   0.034   0.279    0.305    3.65   0.233     0.380   0.537   0.149   0.549    0.670
S. D.     0.100   0.213   0.043   3.472   0.790   0.016   0.159    0.121    1.47   0.105     0.299   0.629   0.048   0.226    0.332
LOW       0.220   0.060   0.030   1.310   0.145   0.020   0.090    0.075    2.19   0.150     0.120   0.060   0.080   0.250    0.360
HIGH      0.570   0.810   0.150  11.100   2.500   0.070   0.630    0.485    6.25   0.460     0.870   1.250   0.255   0.880    1.370

 DOGFISH, SPINY                   SQUALUS ACANTHIAS                        141007   AREA- PACIFIC NORTHWEST   SITE- I7   MUSCLE

LENGTH     NUM   10   MEAN        1.017   S. D.       0.056   LOW        0.870   HIGH         1.075
WEIGHT     NUM    1   MEAN        1.040   S. D.       0.000   LOW        1.040   HIGH         1.040
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0010    0010    0010    0010    0010    0010    0009     0010    0010    0010      0010    0010    0010    0010     0009
N DET.     0000    0000    0000    0000    0000    0002    0000     0000    0000    0000      0007    0007    0000    0001     0000
MEAN      0.825   0.594   0.058   3.999   0.404   0.032   0.124    0.259    3.41   0.146     0.187   0.193   0.114   0.586    0.915
S. D.     0.411   0.276   0.027   1.244   0.309   0.013   0.051    0.090    0.95   0.041     0.219   0.122   0.055   0.223    0.579
LOW       0.195   0.310   0.030   2.462   0.020   0.010   0.040    0.130    2.37   0.070     0.060   0.060   0.055   0.250    0.360
HIGH      1.600   1.060   0.115   6.570   1.115   0.050   0.190    0.410    5.44   0.215     0.440   0.300   0.210   1.000    1.880

 DOGFISH, SPINY                   SQUALUS ACANTHIAS                        141007   AREA- PACIFIC NORTHWEST   SITE- I7   LIVER

LENGTH     NUM   10   MEAN        1.017   S. D.       0.056   LOW        0.870   HIGH         1.075
WEIGHT     NUM    0   MEAN        0.000   S. D.       0.000   LOW        0.000   HIGH         0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0009    0010    0010    0010    0010    0010    0010     0010    0010    0010      0010    0010    0010    0010     0010
N DET.     0001    0000    0000    0000    0000    0001    0004     0000    0000    0000      0005    0007    0000    0002     0001
MEAN      0.174   0.278   0.566   6.307   0.327   0.069   0.092    2.370    5.13   0.081     0.188   0.360   0.326   0.376    0.328
S. D.     0.122   0.247   0.343   3.095   0.226   0.074   0.056    2.140    2.32   0.059     0.088   0.044   0.155   0.245    0.297
LOW       0.040   0.060   0.100   2.210   0.040   0.010   0.020    0.440    2.50   0.010     0.060   0.310   0.140   0.060    0.060
HIGH      0.360   0.750   1.130  12.975   0.665   0.230   0.160    7.500   10.00   0.210     0.310   0.390   0.540   0.810    1.000

 DOGFISH, SPINY                   SQUALUS ACANTHIAS                        141007   AREA- PACIFIC NORTHWEST   SITE- M8   MUSCLE

LENGTH     NUM    1   MEAN        0.810   S. D.       0.000   LOW        0.810   HIGH         0.810
WEIGHT     NUM    1   MEAN        1.814   S. D.       0.000   LOW        1.814   HIGH         1.814
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001     0001    0001    0001      0001    0001    0001    0001     0001
N DET.     0000    0000    0000    0000    0000    0001    0000     0000    0000    0001      0001    0001    0000    0000     0000
MEAN      0.700   0.050   0.140   9.900   0.890   0.000   0.320    0.290    2.86   0.000     0.000   0.000   0.070   0.360    0.930
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000    0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.00   0.000     0.000   0.000   0.000   0.000    0.000
HIGH      0.700   0.050   0.140   9.900   0.890   0.000   0.320    0.290    2.86   0.000     0.000   0.000   0.070   0.360    0.930

 DOGFISH, SPINY                   SQUALUS ACANTHIAS                        141007   AREA- PACIFIC NORTHWEST   SITE- N1   MUSCLE

LENGTH     NUM    8   MEAN        0.895   S. D.       0.000   LOW        0.895   HIGH         0.895
WEIGHT     NUM    0   MEAN        0.000   S. D.       0.000   LOW        0.000   HIGH         0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

NUMBER     0010    0010    0010    0010    0010    0010    0010     0010    0010    0010      0009    0009    0010    0010     0008
N DET.     0000    0001    0003    0000    0000    0004    0000     0000    0000    0003      0007    0009    0000    0003     0000
MEAN      1.059   0.342   0.069   7.148   0.450   0.068   0.173    0.252    3.61   0.170     0.095   0.000   0.126   0.617    0.753
S. D.     0.292   0.145   0.029   2.684   0.178   0.050   0.077    0.090    1.34   0.100     0.049   0.000   0.058   0.453    0.585
LOW       0.720   0.150   0.040   4.400   0.220   0.030   0.050    0.125    1.61   0.070     0.060   0.000   0.040   0.120    0.350
HIGH      1.560   0.575   0.110  12.600   0.790   0.150   0.310    0.450    6.43   0.360     0.130   0.000   0.200   1.400    2.130
```

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

DOGFISH, SPINY SQUALUS ACANTHIAS 141007 AREA- PACIFIC NORTHWEST SITE- R2 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	7	0.810	0.090	0.668	0.956
WEIGHT	6	2.482	1.066	1.210	3.856

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0006
N DET.	0000	0000	0001	0000	0000	0005	0000	0000	0000	0001	0004	0006	0001	0001	0000
MEAN	0.313	0.344	0.094	5.881	0.333	0.045	0.250	0.374	5.20	0.254	0.260	0.280	0.313	1.193	10.504
S. D.	0.115	0.050	0.036	2.358	0.153	0.021	0.099	0.115	2.16	0.116	0.159	0.000	0.151	0.722	13.953
LOW	0.170	0.280	0.055	2.200	0.080	0.030	0.100	0.210	2.57	0.125	0.140	0.000	0.070	0.203	0.500
HIGH	0.500	0.405	0.140	9.760	0.530	0.060	0.430	0.520	8.50	0.390	0.440	0.280	0.480	2.330	38.375

DOGFISH, SPINY SQUALUS ACANTHIAS 141007 AREA- PACIFIC NORTHWEST SITE- R5 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	2	0.685	0.000	0.685	0.685
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0001	0000	0000	0002	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.195	0.165	0.070	6.700	0.155	0.000	0.175	0.195	3.04	0.285	0.000	0.000	0.035	1.430	1.475
S. D.	0.078	0.021	0.000	5.940	0.106	0.000	0.106	0.120	0.76	0.106	0.000	0.000	0.007	0.000	0.601
LOW	0.140	0.150	0.000	2.500	0.080	0.000	0.100	0.110	2.50	0.210	0.000	0.000	0.030	0.000	1.050
HIGH	0.250	0.180	0.070	10.900	0.230	0.000	0.250	0.280	3.57	0.360	0.000	0.000	0.040	1.430	1.900

HAMMERHEAD, SCALLOPED SPHYRNA LEWINI 143001 AREA- NORTH ATLANTIC SITE- S7 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	6	1.450	0.055	1.380	1.530
WEIGHT	6	34.428	4.660	29.510	42.222

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0005	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0004	0000	0000	0000
MEAN	1.453	1.288	0.093	4.334	0.878	0.038	0.122	0.646	4.82	0.379	0.215	1.090	0.105	0.713	0.483
S. D.	0.225	0.904	0.086	1.558	0.368	0.010	0.043	0.386	1.73	0.300	0.035	0.665	0.038	0.141	0.334
LOW	1.195	0.440	0.035	2.516	0.370	0.020	0.080	0.130	2.40	0.170	0.190	0.620	0.070	0.560	0.060
HIGH	1.820	2.810	0.260	7.043	1.470	0.050	0.190	1.310	7.19	0.870	0.240	1.560	0.160	0.940	1.090

HAMMERHEAD, SCALLOPED SPHYRNA LEWINI 143001 AREA- SOUTH ATLANTIC SITE- C5 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	6	1.593	0.246	1.290	1.945
WEIGHT	5	49.758	29.123	20.884	90.800

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0004	0000	0000	0000
MEAN	2.547	0.854	0.076	5.973	0.836	0.035	0.208	0.461	5.05	0.231	0.117	0.185	0.128	0.704	0.521
S. D.	0.647	0.241	0.039	2.320	0.371	0.016	0.137	0.213	0.78	0.026	0.051	0.134	0.034	0.175	0.207
LOW	1.980	0.560	0.030	2.650	0.420	0.020	0.060	0.090	4.37	0.195	0.060	0.090	0.095	0.380	0.240
HIGH	3.530	1.275	0.120	8.770	1.415	0.060	0.440	0.625	6.56	0.260	0.160	0.280	0.190	0.880	0.750

HAMMERHEAD, SMOOTH SPHYRNA ZYGAENA 143005 AREA- SOUTH ATLANTIC SITE- M1 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	10	1.564	0.239	1.153	1.800
WEIGHT	9	30.816	15.389	17.252	61.235

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0009	0010	0009	0010	0010	0010	0010	0009
N DET.	0000	0000	0000	0000	0000	0003	0000	0001	0000	0001	0008	0008	0000	0002	0000
MEAN	2.663	0.658	0.077	7.225	1.150	0.025	0.227	0.420	4.53	0.155	0.065	0.605	0.106	0.656	0.443
S. D.	0.810	0.393	0.025	3.687	0.547	0.010	0.239	0.073	1.74	0.076	0.078	0.332	0.031	0.196	0.148
LOW	1.755	0.170	0.040	3.216	0.620	0.010	0.060	0.330	3.21	0.050	0.010	0.370	0.060	0.390	0.200
HIGH	3.930	1.503	0.120	13.620	2.300	0.040	0.870	0.540	9.25	0.280	0.120	0.840	0.140	0.940	0.690

HAMMERHEAD, SMOOTH SPHYRNA ZYGAENA 143005 AREA- SOUTH ATLANTIC SITE- M1 LIVER

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	7	1.498	0.261	1.153	1.800
WEIGHT	6	35.783	17.090	16.027	61.235

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0006
N DET.	0000	0000	0000	0000	0000	0004	0000	0000	0000	0001	0001	0003	0000	0002	0000
MEAN	2.751	0.535	1.735	33.781	10.806	0.053	0.190	2.965	18.02	0.557	0.570	0.408	1.394	0.758	0.253
S. D.	2.332	0.313	1.871	31.517	12.718	0.021	0.166	0.881	9.73	0.467	0.103	0.377	0.530	0.556	0.069
LOW	0.440	0.100	0.470	6.600	1.030	0.030	0.050	1.845	8.32	0.170	0.470	0.090	0.635	0.120	0.185
HIGH	7.050	0.930	5.820	84.000	37.500	0.070	0.500	4.280	31.78	1.430	0.720	0.940	2.180	1.650	0.380

SHARK, WHITE CARCHARODON CARCHARIAS 144001 AREA- NORTH ATLANTIC SITE- N2 MUSCLE

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	2	1.325	0.120	1.240	1.410
WEIGHT	2	25.878	8.347	19.976	31.780

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.585	0.285	0.068	9.765	0.600	0.033	0.255	0.725	4.42	0.220	0.000	0.000	0.060	1.130	0.410
S. D.	0.177	0.049	0.011	0.000	0.000	0.004	0.106	0.134	1.12	0.113	0.000	0.000	0.000	0.000	0.000
LOW	0.460	0.250	0.060	0.000	0.000	0.030	0.180	0.630	3.63	0.140	0.000	0.000	0.060	0.000	0.000
HIGH	0.710	0.320	0.075	9.765	0.600	0.035	0.330	0.820	5.21	0.300	0.000	0.000	0.060	1.130	0.410

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES: BY TISSUE AND LOCATION

LOCATION LEVEL 5

MAKO, SHORTFIN ISURUS OXYRINCHUS 144003 AREA- NORTH ATLANTIC SITE- N2 MUSCLE

LENGTH NUM 3 MEAN 1.828 S. D. 0.118 LOW 1.710 HIGH 1.945
WEIGHT NUM 3 MEAN 63.863 S. D. 15.780 LOW 46.762 HIGH 77.861

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	2.410	0.793	0.057	5.883	1.112	0.057	0.103	0.357	2.92	0.213	0.060	0.190	0.080	0.627	0.500
S. D.	1.215	0.437	0.029	2.948	0.846	0.064	0.075	0.393	1.03	0.025	0.000	0.000	0.046	0.125	0.104
LOW	1.550	0.380	0.040	2.550	0.490	0.020	0.060	0.130	1.75	0.190	0.000	0.000	0.030	0.500	0.380
HIGH	3.800	1.250	0.090	8.150	2.075	0.130	0.190	0.810	3.69	0.240	0.060	0.190	0.120	0.750	0.560

MAKO, SHORTFIN ISURUS OXYRINCHUS 144003 AREA- NORTH ATLANTIC SITE- N2 LIVER

LENGTH NUM 2 MEAN 1.888 S. D. 0.081 LOW 1.830 HIGH 1.945
WEIGHT NUM 2 MEAN 72.413 S. D. 7.705 LOW 66.965 HIGH 77.861

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0000	0000
MEAN	1.175	0.280	0.685	13.460	1.620	0.080	0.155	4.345	8.63	0.160	0.250	0.000	0.295	0.535	0.315
S. D.	1.167	0.042	0.389	1.235	0.891	0.028	0.134	0.304	2.74	0.071	0.000	0.000	0.064	0.134	0.092
LOW	0.350	0.250	0.410	12.587	0.990	0.060	0.060	4.130	6.69	0.110	0.000	0.000	0.250	0.440	0.250
HIGH	2.000	0.310	0.960	14.333	2.250	0.100	0.250	4.560	10.56	0.210	0.250	0.000	0.340	0.630	0.380

SHARK, BLACKTIP CARCHARHINUS LIMBATUS 145006 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH NUM 10 MEAN 0.818 S. D. 0.137 LOW 0.642 HIGH 1.092
WEIGHT NUM 10 MEAN 4.151 S. D. 4.745 LOW 1.873 HIGH 17.479

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0006	0005	0000	0000	0000
MEAN	0.490	0.731	0.069	11.046	0.800	0.043	0.204	0.318	3.45	0.200	0.244	0.306	0.105	0.751	0.459
S. D.	0.245	0.597	0.036	5.777	0.345	0.013	0.186	0.116	0.97	0.043	0.146	0.227	0.027	0.302	0.159
LOW	0.156	0.250	0.030	4.262	0.280	0.025	0.060	0.040	1.25	0.145	0.095	0.060	0.050	0.190	0.310
HIGH	1.015	2.360	0.165	23.400	1.420	0.065	0.690	0.455	4.78	0.280	0.440	0.630	0.135	1.190	0.815

SHARK, BLACKTIP CARCHARHINUS LIMBATUS 145006 AREA- SOUTH ATLANTIC SITE- C2 LIVER

LENGTH NUM 3 MEAN 1.011 S. D. 0.140 LOW 0.850 HIGH 1.092
WEIGHT NUM 3 MEAN 7.241 S. D. 8.874 LOW 1.748 HIGH 17.479

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0003	0000	0000	0000
MEAN	0.065	0.342	0.443	13.677	1.947	0.045	0.153	1.803	4.72	0.227	0.280	0.000	0.750	0.540	0.470
S. D.	0.007	0.174	0.046	4.668	0.474	0.030	0.163	0.333	1.51	0.139	0.042	0.000	0.376	0.315	0.177
LOW	0.060	0.155	0.390	10.282	1.400	0.025	0.040	1.500	3.12	0.110	0.250	0.000	0.480	0.190	0.280
HIGH	0.070	0.500	0.470	19.000	2.240	0.080	0.340	2.160	6.13	0.380	0.310	0.000	1.180	0.800	0.630

SHARK, BLACKTIP CARCHARHINUS LIMBATUS 145006 AREA- SOUTH ATLANTIC SITE- M1 MUSCLE

LENGTH NUM 1 MEAN 1.190 S. D. 0.000 LOW 1.190 HIGH 1.190
WEIGHT NUM 1 MEAN 18.144 S. D. 0.000 LOW 18.144 HIGH 18.144

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0003	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0000	0001
MEAN	0.578	0.501	0.169	9.141	1.359	0.050	0.133	0.468	5.12	0.348	0.120	0.440	0.123	0.573	0.377
S. D.	0.520	0.303	0.209	1.200	0.553	0.036	0.074	0.238	2.14	0.310	0.000	0.000	0.046	0.127	0.164
LOW	0.020	0.250	0.035	7.925	0.980	0.020	0.050	0.295	3.44	0.060	0.000	0.440	0.090	0.450	0.190
HIGH	1.190	0.940	0.480	10.350	2.170	0.100	0.230	0.740	8.10	0.780	0.120	0.440	0.190	0.750	0.500

SHARK, BLACKTIP CARCHARHINUS LIMBATUS 145006 AREA- SOUTH ATLANTIC SITE- M1 LIVER

LENGTH NUM 1 MEAN 1.190 S. D. 0.000 LOW 1.190 HIGH 1.190
WEIGHT NUM 1 MEAN 18.144 S. D. 0.000 LOW 18.144 HIGH 18.144

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	0.730	0.255	1.070	48.675	31.350	0.000	0.100	1.780	9.28	0.360	0.000	0.000	0.610	0.000	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.730	0.255	1.070	48.675	31.350	0.000	0.100	1.780	9.28	0.360	0.000	0.000	0.610	0.000	0.380

SHARK, BLACKTIP CARCHARHINUS LIMBATUS 145006 AREA- GULF SITE- D7 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	2.020	0.740	0.038	4.396	1.218	0.025	0.328	0.263	3.23	0.165	0.380	0.310	0.115	0.635	0.565
S. D.	0.764	0.014	0.011	3.367	0.265	0.007	0.237	0.018	0.04	0.148	0.000	0.000	0.049	0.120	0.262
LOW	1.480	0.730	0.030	2.015	1.030	0.020	0.160	0.250	3.20	0.060	0.000	0.000	0.080	0.550	0.380
HIGH	2.560	0.750	0.045	6.776	1.405	0.030	0.495	0.275	3.26	0.270	0.380	0.310	0.150	0.720	0.750

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                                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   MF17
                                                       IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                                      BY TISSUE AND LOCATION


 SHARK, SANDBAR                          CARCHARHINUS MILBERTI                145009   AREA- NORTH ATLANTIC       SITE- N2   MUSCLE

 ENGTH      NUM   10   MEAN          1.362   S. D.      0.224   LOW       0.997   HIGH          1.745
 EIGHT      NUM   10   MEAN         27.539   S. D.     14.164   LOW       9.534   HIGH         54.934
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM     PPM     PPM      PPM

 UMBER       0010    0010    0010    0009    0009    0010    0010    0010   0010    0010      0010   0010    0010    0010     0010
  DET.       0000    0000    0000    0000    0000    0001    0002    0000   0000    0000      0006   0010    0000    0000     0000
 EAN        1.490   1.221   0.085   7.975   0.678   0.029   0.158   0.474   6.71   0.214     0.173  0.000   0.097   0.646    0.533
 S. D.      0.351   0.613   0.044   3.075   0.247   0.012   0.103   0.352   2.64   0.059     0.080  0.000   0.034   0.142    0.108
 LOW        0.960   0.440   0.040   2.766   0.400   0.010   0.060   0.060   4.38   0.130     0.060  0.000   0.040   0.440    0.380
 HIGH       2.330   2.380   0.160  13.865   1.120   0.050   0.380   1.180  11.75   0.290     0.250  0.000   0.160   0.970    0.700

 SHARK, SANDBAR                          CARCHARHINUS MILBERTI                145009   AREA- NORTH ATLANTIC       SITE- N2   LIVER

 LENGTH     NUM   7    MEAN          1.387   S. D.      0.238   LOW       0.997   HIGH          1.745
 WEIGHT     NUM   7    MEAN         29.483   S. D.     14.068   LOW       9.534   HIGH         54.934
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0007    0007    0006    0007    0007    0007    0007    0007   0007    0007      0006   0006    0007    0007     0006
 N DET.      0000    0001    0001    0000    0000    0003    0003    0000   0000    0001      0001   0003    0000    0002     0000
 MEAN       6.566   0.620   0.366  28.321   2.134   0.035   0.141   1.944   9.69   0.242     0.228  0.293   0.596   0.336    0.367
 S. D.     10.609   0.356   0.253  18.574   0.592   0.026   0.089   1.834   7.33   0.186     0.085  0.075   0.294   0.036    0.311
 LOW        0.670   0.350   0.040   5.500   1.520   0.010   0.060   0.110   0.93   0.090     0.180  0.250   0.180   0.310    0.200
 HIGH      30.200   1.300   0.690  53.300   3.280   0.070   0.235   5.500  23.93   0.500     0.380  0.380   0.930   0.380    1.000

 SHARK, SANDBAR                          CARCHARHINUS MILBERTI                145009   AREA- GULF                 SITE- D7   MUSCLE

 LENGTH     NUM   0    MEAN          0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
 WEIGHT     NUM   0    MEAN          0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0003    0003    0003    0002    0002    0003    0003    0003   0003    0003      0003   0003    0003    0003     0003
 N DET.      0000    0000    0000    0000    0000    0001    0000    0000   0000    0000      0002   0002    0000    0001     0000
 MEAN       1.088   0.990   0.053   8.025   1.025   0.038   0.090   0.317   4.21   0.183     0.620  0.200   0.058   0.613    1.095
 S. D.      0.865   0.764   0.015   0.177   0.247   0.004   0.106   0.051   0.48   0.127     0.000  0.000   0.028   0.018    0.903
 LOW        0.100   0.500   0.040   7.900   0.850   0.035   0.010   0.260   3.70   0.070     0.000  0.000   0.030   0.600    0.380
 HIGH       1.705   1.870   0.070   8.150   1.200   0.040   0.210   0.360   4.65   0.320     0.620  0.200   0.085   0.625    2.110

 SHARK, DUSKY                            CARCHARHINUS OBSCURUS                145010   AREA- NORTH ATLANTIC       SITE- N2   MUSCLE

 LENGTH     NUM   1    MEAN          1.340   S. D.      0.000   LOW       1.340   HIGH          1.340
 WEIGHT     NUM   1    MEAN         22.700   S. D.      0.000   LOW      22.700   HIGH         22.700
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0001    0001    0001    0001    0001    0001    0001    0001   0001    0001      0001   0001    0001    0001     0001
 N DET.      0000    0000    0000    0000    0000    0000    0000    0000   0000    0000      0001   0001    0000    0000     0000
 MEAN       1.780   1.250   0.100   7.550   1.050   0.080   0.190   0.310   3.94   0.270     0.000  0.000   0.880   0.340    0.220
 S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00   0.000     0.000  0.000   0.000   0.000    0.000
 LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00   0.000     0.000  0.000   0.000   0.000    0.000
 HIGH       1.780   1.250   0.100   7.550   1.050   0.080   0.190   0.310   3.94   0.270     0.000  0.000   0.880   0.340    0.220

 SHARK, DUSKY                            CARCHARHINUS OBSCURUS                145010   AREA- SOUTH ATLANTIC       SITE- M1   MUSCLE

 LENGTH     NUM   1    MEAN          1.981   S. D.      0.000   LOW       1.981   HIGH          1.981
 WEIGHT     NUM   1    MEAN         38.590   S. D.      0.000   LOW      38.590   HIGH         38.590
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0001    0001    0001    0001    0001    0001    0001    0001   0001    0001      0001   0001    0001    0001     0001
 N DET.      0000    0000    0000    0000    0000    0000    0000    0000   0000    0000      0001   0001    0000    0000     0000
 MEAN       1.570   0.440   0.090   7.900   1.300   0.050   0.190   0.710   8.50   0.190     0.000  0.000   0.110   0.440    0.630
 S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00   0.000     0.000  0.000   0.000   0.000    0.000
 LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.00   0.000     0.000  0.000   0.000   0.000    0.000
 HIGH       1.570   0.440   0.090   7.900   1.300   0.050   0.190   0.710   8.50   0.190     0.000  0.000   0.110   0.440    0.630

 SHARK, DUSKY                            CARCHARHINUS OBSCURUS                145010   AREA- GULF                 SITE- D7   MUSCLE

 LENGTH     NUM   0    MEAN          0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
 WEIGHT     NUM   0    MEAN          0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0002    0002    0002    0001    0001    0002    0002    0002   0002    0002      0002   0002    0002    0002     0002
 N DET.      0000    0000    0000    0000    0000    0001    0000    0000   0000    0000      0002   0002    0000    0001     0000
 MEAN       1.383   0.620   0.083  21.805   0.800   0.065   0.083   0.258   4.01   0.268     0.000  0.000   0.090   0.690    0.293
 S. D.      0.279   0.240   0.039   0.000   0.000   0.000   0.025   0.032   0.90   0.074     0.000  0.000   0.085   0.000    0.053
 LOW        1.185   0.450   0.055   0.000   0.000   0.000   0.065   0.235   3.37   0.215     0.000  0.000   0.030   0.000    0.255
 HIGH       1.580   0.790   0.110  21.805   0.800   0.065   0.100   0.280   4.64   0.320     0.000  0.000   0.150   0.690    0.330

 DOGFISH, SMOOTH                         MUSTELUS CANIS                       145018   AREA- NORTH ATLANTIC       SITE- H8   MUSCLE

 LENGTH     NUM   17   MEAN          0.861   S. D.      0.117   LOW       0.686   HIGH          1.194
 WEIGHT     NUM   10   MEAN          1.979   S. D.      0.411   LOW       1.418   HIGH          2.438
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0021    0021    0021    0021    0020    0021    0021    0020   0020    0021      0021   0021    0021    0021     0021
 N DET.      0000    0000    0001    0000    0000    0004    0000    0000   0000    0001      0015   0016    0000    0002     0000
 MEAN       0.400   0.881   0.287   9.476   0.788   0.032   0.251   0.288   4.23   0.223     0.202  0.362   0.191   0.797    0.521
 S. D.      0.288   0.480   0.757   3.971   0.284   0.013   0.141   0.128   0.96   0.094     0.156  0.436   0.103   0.329    0.183
 LOW        0.060   0.310   0.040   4.820   0.303   0.010   0.050   0.040   2.94   0.080     0.060  0.060   0.085   0.380    0.285
 HIGH       1.050   2.060   3.475  20.330   1.342   0.070   0.560   0.640   6.72   0.440     0.440  1.090   0.450   1.590    0.940
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

DOGFISH, SMOOTH   MUSTELUS CANIS   145018   AREA- NORTH ATLANTIC   SITE- I7   MUSCLE

LENGTH NUM 1 MEAN 1.120 S. D. 0.000 LOW 1.120 HIGH 1.120
WEIGHT NUM 1 MEAN 4.540 S. D. 0.000 LOW 4.540 HIGH 4.540

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	000
MEAN	1.700	0.940	0.080	7.180	1.320	0.020	0.130	0.260	5.38	0.190	0.000	0.000	0.080	0.000	0.560
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	1.700	0.940	0.080	7.180	1.320	0.020	0.130	0.260	5.38	0.190	0.000	0.000	0.080	0.000	0.560

DOGFISH, SMOOTH   MUSTELUS CANIS   145018   AREA- NORTH ATLANTIC   SITE- N2   MUSCLE

LENGTH NUM 3 MEAN 0.887 S. D. 0.025 LOW 0.860 HIGH 0.910
WEIGHT NUM 4 MEAN 2.601 S. D. 0.396 LOW 2.210 HIGH 3.100

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0003	0000	0004	0000
MEAN	1.118	0.728	0.081	6.669	0.438	0.026	0.149	0.186	4.35	0.239	0.000	0.170	0.096	0.000	0.549
S. D.	0.684	0.356	0.025	4.038	0.258	0.014	0.087	0.091	0.81	0.030	0.000	0.000	0.025	0.000	0.232
LOW	0.320	0.500	0.050	1.050	0.080	0.010	0.060	0.100	3.44	0.210	0.000	0.000	0.070	0.000	0.285
HIGH	1.760	1.250	0.110	10.360	0.695	0.040	0.250	0.310	5.38	0.280	0.000	0.170	0.130	0.000	0.810

DOGFISH, SMOOTH   MUSTELUS CANIS   145018   AREA- NORTH ATLANTIC   SITE- N3   MUSCLE

LENGTH NUM 1 MEAN 1.070 S. D. 0.000 LOW 1.070 HIGH 1.070
WEIGHT NUM 1 MEAN 4.540 S. D. 0.000 LOW 4.540 HIGH 4.540

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	0000
MEAN	1.675	0.595	0.060	8.800	0.425	0.030	0.110	0.180	7.22	0.195	0.000	0.000	0.115	0.000	0.575
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	1.675	0.595	0.060	8.800	0.425	0.030	0.110	0.180	7.22	0.195	0.000	0.000	0.115	0.000	0.575

DOGFISH, SMOOTH   MUSTELUS CANIS   145018   AREA- NORTH ATLANTIC   SITE- N4   MUSCLE

LENGTH NUM 9 MEAN 0.933 S. D. 0.123 LOW 0.770 HIGH 1.100
WEIGHT NUM 6 MEAN 2.366 S. D. 0.522 LOW 1.711 HIGH 2.974

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0002	0000	0000	0000	0010	0010	0000	0008	0000
MEAN	1.084	0.989	0.079	6.511	0.581	0.037	0.215	0.291	4.65	0.225	0.000	0.000	0.116	0.500	0.513
S. D.	0.629	0.511	0.029	4.387	0.221	0.009	0.148	0.138	1.52	0.068	0.000	0.000	0.059	0.269	0.114
LOW	0.300	0.560	0.040	1.900	0.250	0.020	0.070	0.100	2.56	0.090	0.000	0.000	0.060	0.310	0.380
HIGH	1.980	1.940	0.140	16.500	0.810	0.050	0.500	0.560	6.97	0.310	0.000	0.000	0.270	0.690	0.810

DOGFISH, SMOOTH   MUSTELUS CANIS   145018   AREA- NORTH ATLANTIC   SITE- N5   MUSCLE

LENGTH NUM 3 MEAN 0.937 S. D. 0.055 LOW 0.900 HIGH 1.000
WEIGHT NUM 3 MEAN 2.848 S. D. 0.397 LOW 2.555 HIGH 3.300

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0001	0000
MEAN	1.127	1.067	0.060	3.675	0.607	0.037	0.087	0.347	3.98	0.210	0.000	0.000	0.090	0.565	0.740
S. D.	0.718	0.497	0.026	1.425	0.129	0.012	0.046	0.208	0.63	0.197	0.000	0.000	0.000	0.092	0.494
LOW	0.580	0.690	0.030	2.475	0.500	0.030	0.060	0.120	3.25	0.030	0.000	0.000	0.090	0.500	0.440
HIGH	1.940	1.630	0.080	5.250	0.750	0.050	0.140	0.530	4.38	0.420	0.000	0.000	0.090	0.630	1.310

DOGFISH, SMOOTH   MUSTELUS CANIS   145018   AREA- NORTH ATLANTIC   SITE- N7   MUSCLE

LENGTH NUM 20 MEAN 0.927 S. D. 0.119 LOW 0.740 HIGH 1.200
WEIGHT NUM 18 MEAN 2.571 S. D. 0.609 LOW 1.510 HIGH 3.450

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0019	0020	0019	0020	0020	0020	0020	0020	0020	0020	0020	0019
N DET.	0000	0000	0000	0000	0001	0002	0001	0000	0000	0000	0017	0015	0000	0006	0000
MEAN	1.154	0.868	0.085	10.015	0.962	0.034	0.192	0.301	4.36	0.207	0.133	0.208	0.120	0.601	0.598
S. D.	0.695	0.556	0.024	5.741	0.344	0.014	0.121	0.129	1.19	0.060	0.023	0.072	0.042	0.244	0.277
LOW	0.350	0.250	0.055	1.230	0.190	0.010	0.060	0.130	2.90	0.060	0.120	0.130	0.080	0.250	0.310
HIGH	3.050	2.190	0.150	21.750	1.840	0.060	0.525	0.710	7.75	0.300	0.160	0.310	0.250	1.190	1.410

DOGFISH, SMOOTH   MUSTELUS CANIS   145018   AREA- NORTH ATLANTIC   SITE- N8   MUSCLE

LENGTH NUM 2 MEAN 0.848 S. D. 0.018 LOW 0.835 HIGH 0.860
WEIGHT NUM 2 MEAN 2.122 S. D. 0.316 LOW 1.898 HIGH 2.345

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0002	0000
MEAN	0.520	0.845	0.070	6.503	0.755	0.035	0.060	0.190	6.31	0.180	0.000	0.000	0.090	0.000	0.550
S. D.	0.085	0.049	0.014	2.188	0.148	0.007	0.000	0.071	2.47	0.113	0.000	0.000	0.000	0.000	0.113
LOW	0.460	0.810	0.060	4.955	0.650	0.030	0.000	0.140	4.56	0.100	0.000	0.000	0.090	0.000	0.470
HIGH	0.580	0.880	0.080	8.050	0.860	0.040	0.060	0.240	8.05	0.260	0.000	0.000	0.090	0.000	0.630

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                                                  TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                    REPORT   MF17
                                                 IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                                 BY TISSUE AND LOCATION

DOGFISH, SMOOTH                   MUSTELUS CANIS                         145018    AREA- NORTH ATLANTIC       SITE- R6    MUSCLE

 ENGTH       NUM   32   MEAN        1.062    S. D.      0.130   LOW       0.740    HIGH         1.240
 EIGHT       NUM   32   MEAN        5.233    S. D.      2.251   LOW       1.488    HIGH        10.440
           MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

 UMBER       0032     0032    0032    0031    0031     0032    0031    0032   0032     0032      0032    0032    0032    0032      0028
  DET.       0000     0000    0000    0000    0000     0001    0001    0000   0000     0000      0030    0028    0000    0008      0000
 EAN        1.363    1.053   0.081  11.888   0.646    0.037   0.236   0.393   4.23    0.225     0.190   0.341   0.120   0.697     0.537
. D.        0.555    0.403   0.023  11.040   0.381    0.009   0.186   0.242   1.18    0.081     0.085   0.100   0.057   0.196     0.189
LOW         0.365    0.380   0.040   1.290   0.050    0.020   0.060   0.150   1.94    0.040     0.130   0.220   0.050   0.310     0.310
HIGH        2.350    2.000   0.140  37.800   1.620    0.060   0.810   1.250   7.50    0.430     0.250   0.455   0.290   1.000     1.000

DOGFISH, SMOOTH                   MUSTELUS CANIS                         145018    AREA- NORTH ATLANTIC       SITE- S4    MUSCLE

LENGTH       NUM   1    MEAN        0.920    S. D.      0.000   LOW       0.920    HIGH         0.920
WEIGHT       NUM   1    MEAN        2.495    S. D.      0.000   LOW       2.495    HIGH         2.495
           MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER       0001     0001    0001    0001    0001     0001    0001    0001   0001     0001      0001    0001    0001    0001      0001
N DET.       0000     0000    0000    0000    0000     0000    0000    0000   0000     0000      0001    0001    0000    0000      0000
MEAN        1.020    0.310   0.040   1.800   1.120    0.030   0.140   0.390   3.06    0.110     0.000   0.000   0.130   0.560     1.130
S. D.       0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
LOW         0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
HIGH        1.020    0.310   0.040   1.800   1.120    0.030   0.140   0.390   3.06    0.110     0.000   0.000   0.130   0.560     1.130

SHARK, BLUE                       PRIONACE GLAUCA                        145023    AREA- NORTH ATLANTIC       SITE- N2    MUSCLE

LENGTH       NUM   14   MEAN        1.897    S. D.      0.296   LOW       1.530    HIGH         2.460
WEIGHT       NUM   14   MEAN       45.872    S. D.     22.959   LOW      21.565    HIGH        88.758
           MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER       0014     0014    0014    0014    0012     0014    0014    0013   0014     0014      0014    0014    0013    0014      0014
N DET.       0000     0000    0000    0000    0000     0001    0001    0000   0000     0000      0008    0012    0000    0000      0000
MEAN        0.880    0.565   0.099  14.579   0.383    0.031   0.160   0.466   6.70    0.231     0.123   0.315   0.110   0.546     0.604
S. D.       0.433    0.348   0.043  10.204   0.149    0.010   0.083   0.205   1.58    0.060     0.105   0.092   0.040   0.167     0.228
LOW         0.350    0.250   0.050   4.725   0.130    0.010   0.060   0.190   4.25    0.160     0.060   0.250   0.060   0.190     0.310
HIGH        1.930    1.630   0.230  45.000   0.690    0.050   0.310   0.930   9.56    0.350     0.310   0.380   0.220   0.750     1.190

SHARK, BLUE                       PRIONACE GLAUCA                        145023    AREA- NORTH ATLANTIC       SITE- N2    LIVER

LENGTH       NUM   9    MEAN        1.798    S. D.      0.270   LOW       1.530    HIGH         2.270
WEIGHT       NUM   9    MEAN       40.045    S. D.     23.237   LOW      21.565    HIGH        88.758
           MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER       0009     0009    0009    0007    0007     0009    0009    0009   0009     0008      0009    0009    0009    0009      0009
N DET.       0002     0000    0000    0000    0000     0002    0005    0000   0000     0000      0001    0005    0000    0002      0000
MEAN        0.127    0.336   4.096  40.739   1.496    0.034   0.156   1.218  14.99    0.273     0.420   0.208   0.818   0.493     0.288
S. D.       0.148    0.132   1.767  26.812   0.288    0.047   0.112   0.363   7.04    0.234     0.116   0.029   0.327   0.287     0.071
LOW         0.020    0.130   1.880   4.980   1.100    0.010   0.060   0.860   8.11    0.120     0.250   0.190   0.090   0.310     0.200
HIGH        0.380    0.560   8.000  73.450   1.820    0.140   0.315   2.000  30.00    0.820     0.560   0.250   1.310   1.130     0.380

SHARK, ATL. SHARPNOSE             RHIZOPRIONODON TERRAENOVAE             145025    AREA- SOUTH ATLANTIC       SITE- M1    MUSCLE

LENGTH       NUM   1    MEAN        0.770    S. D.      0.000   LOW       0.770    HIGH         0.770
WEIGHT       NUM   1    MEAN        3.632    S. D.      0.000   LOW       3.632    HIGH         3.632
           MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER       0001     0001    0001    0001    0001     0001    0001    0001   0001     0001      0001    0001    0001    0001      0001
N DET.       0000     0000    0000    0000    0000     0000    0000    0000   0000     0000      0000    0001    0000    0000      0000
MEAN        0.830    0.690   0.090  11.055   1.240    0.020   0.090   1.030   3.25    2.500     0.250   0.000   0.090   1.120     0.870
S. D.       0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
LOW         0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
HIGH        0.830    0.690   0.090  11.055   1.240    0.020   0.090   1.030   3.25    2.500     0.250   0.000   0.090   1.120     0.870

JACKSMELT                         ATHERINOPSIS CALIFORNIENSIS            149004    AREA- CALIFORNIA           SITE- F4    WHOLE

LENGTH       NUM   20   MEAN        0.298    S. D.      0.030   LOW       0.250    HIGH         0.370
WEIGHT       NUM   20   MEAN        0.180    S. D.      0.034   LOW       0.091    HIGH         0.227
           MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER       0020     0020    0020    0020    0019     0020    0020    0020   0020     0020      0020    0020    0020    0020      0019
N DET.       0004     0000    0000    0001    0000     0000    0000    0000   0000     0000      0005    0000    0000    0000      0000
MEAN        0.062    1.398   0.171   2.209   0.509    0.093   0.283   0.602  29.05    0.353     0.240   0.747   0.608   1.518     8.899
S. D.       0.038    0.594   0.046   1.535   0.259    0.033   0.177   0.229  12.47    0.063     0.081   0.353   0.134   0.378     8.004
LOW         0.020    0.720   0.080   0.225   0.280    0.050   0.060   0.365  12.26    0.250     0.120   0.250   0.340   0.910     0.220
HIGH        0.130    3.370   0.250   6.575   1.520    0.205   0.880   1.260  75.00    0.480     0.440   1.485   0.880   2.190    27.265

SKATE, LITTLE                     RAJA ERINACEA                          150005    AREA- NORTH ATLANTIC       SITE- I7    MUSCLE

LENGTH       NUM   1    MEAN        0.490    S. D.      0.000   LOW       0.490    HIGH         0.490
WEIGHT       NUM   0    MEAN        0.000    S. D.      0.000   LOW       0.000    HIGH         0.000
           MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM      PPM     PPM     PPM     PPM      PPM     PPM     PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER       0001     0001    0001    0001    0001     0001    0001    0001   0001     0001      0001    0001    0001    0001      0001
N DET.       0000     0000    0000    0000    0000     0000    0000    0000   0000     0000      0000    0000    0000    0000      0000
MEAN        0.305    1.265   0.296  12.000   0.735    0.135   0.860   0.626   8.35    0.603     0.410   1.300   1.386   1.255     0.950
S. D.       0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
LOW         0.000    0.000   0.000   0.000   0.000    0.000   0.000   0.000   0.00    0.000     0.000   0.000   0.000   0.000     0.000
HIGH        0.305    1.265   0.296  12.000   0.735    0.135   0.860   0.626   8.35    0.603     0.410   1.300   1.386   1.255     0.950
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                                          TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                               REPORT   M
                                          IN RESOURCE SURVEY SPECIES:
LOCATION LEVEL 5                          BY TISSUE AND LOCATION


SKATE, LITTLE                    RAJA ERINACEA                     150005    AREA- NORTH ATLANTIC       SITE- I7    LIVER

LENGTH       NUM   1   MEAN      0.490   S. D.      0.000   LOW       0.490   HIGH      0.490
WEIGHT       NUM   0   MEAN      0.000   S. D.      0.000   LOW       0.000   HIGH      0.000
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000
MEAN          0.120    1.060    0.510    5.650    0.880    0.010    0.310    3.310    13.13    0.220    0.130    0.310    0.020    0.500    0.380
S. D.         0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
LOW           0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
HIGH          0.120    1.060    0.510    5.650    0.880    0.010    0.310    3.310    13.13    0.220    0.130    0.310    0.020    0.500    0.380

SKATE, LITTLE                    RAJA ERINACEA                     150005    AREA- NORTH ATLANTIC       SITE- J6    MUSCLE

LENGTH       NUM   3   MEAN      0.465   S. D.      0.011   LOW       0.454   HIGH      0.475
WEIGHT       NUM   3   MEAN      0.615   S. D.      0.017   LOW       0.604   HIGH      0.635
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0003     0003     0003     0003     0003     0003     0003     0003     0003     0003     0003     0003     0003     0003     0003
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0001     0003     0000     0003     0000
MEAN          0.097    0.468    0.068   12.205    0.427    0.042    0.442    0.512     6.62    0.393    0.160    0.000    0.337    0.000    0.735
S. D.         0.035    0.030    0.014    1.611    0.327    0.008    0.272    0.105     1.14    0.042    0.042    0.000    0.064    0.000    0.105
LOW           0.060    0.440    0.060   10.350    0.050    0.035    0.130    0.395     5.31    0.360    0.130    0.000    0.300    0.000    0.630
HIGH          0.130    0.500    0.085   13.250    0.630    0.050    0.630    0.600     7.38    0.440    0.190    0.000    0.410    0.000    0.840

SKATE, LITTLE                    RAJA ERINACEA                     150005    AREA- NORTH ATLANTIC       SITE- J7    MUSCLE

LENGTH       NUM  14   MEAN      0.443   S. D.      0.028   LOW       0.357   HIGH      0.472
WEIGHT       NUM  14   MEAN      0.535   S. D.      0.101   LOW       0.245   HIGH      0.625
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0014     0014     0014     0014     0012     0014     0013     0014     0014     0014     0014     0014     0014     0014     0014
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0005     0009     0000     0013     0000
MEAN          0.121    0.584    0.094   18.631    0.649    0.076    0.343    0.426     8.54    0.392    0.166    0.196    0.839    0.250    0.928
S. D.         0.041    0.218    0.017   11.336    0.253    0.033    0.227    0.088     1.20    0.097    0.044    0.091    0.442    0.000    0.342
LOW           0.060    0.300    0.070    0.460    0.050    0.030    0.130    0.310     6.63    0.240    0.090    0.130    0.130    0.000    0.560
HIGH          0.200    1.130    0.130   47.400    0.970    0.150    0.970    0.640    10.25    0.540    0.250    0.310    1.740    0.250    1.630

SKATE, LITTLE                    RAJA ERINACEA                     150005    AREA- NORTH ATLANTIC       SITE- M9    MUSCLE

LENGTH       NUM   5   MEAN      0.461   S. D.      0.029   LOW       0.423   HIGH      0.490
WEIGHT       NUM   5   MEAN      0.866   S. D.      0.087   LOW       0.756   HIGH      0.965
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0001     0000     0000     0000     0000
MEAN          0.206    0.987    0.100   19.620    0.745    0.078    0.238    0.305     7.82    0.323    0.208    0.305    1.251    1.332    1.124
S. D.         0.072    0.285    0.014    8.961    0.070    0.008    0.016    0.070     1.27    0.142    0.033    0.097    0.275    0.154    0.052
LOW           0.130    0.530    0.080   11.725    0.650    0.070    0.220    0.200     6.13    0.150    0.175    0.190    1.010    1.130    1.080
HIGH          0.325    1.230    0.115   33.750    0.800    0.090    0.250    0.370     9.30    0.460    0.250    0.435    1.600    1.500    1.190

SKATE, LITTLE                    RAJA ERINACEA                     150005    AREA- NORTH ATLANTIC       SITE- N2    MUSCLE

LENGTH       NUM   1   MEAN      0.371   S. D.      0.000   LOW       0.371   HIGH      0.371
WEIGHT       NUM   1   MEAN      0.704   S. D.      0.000   LOW       0.704   HIGH      0.704
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000
MEAN          0.115    1.265    0.140   13.816    0.550    0.075    0.190    0.265     5.97    0.340    0.280    0.310    2.085    1.155    1.025
S. D.         0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
LOW           0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
HIGH          0.115    1.265    0.140   13.816    0.550    0.075    0.190    0.265     5.97    0.340    0.280    0.310    2.085    1.155    1.025

SKATE, LITTLE                    RAJA ERINACEA                     150005    AREA- NORTH ATLANTIC       SITE- N3    MUSCLE

LENGTH       NUM   1   MEAN      0.455   S. D.      0.000   LOW       0.455   HIGH      0.455
WEIGHT       NUM   0   MEAN      0.000   S. D.      0.000   LOW       0.000   HIGH      0.000
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0000
N DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000
MEAN          0.220    0.940    0.120   45.450    0.390    0.130    0.410    2.250     7.13    0.510    0.060    0.310    1.130    1.880    0.000
S. D.         0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
LOW           0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
HIGH          0.220    0.940    0.120   45.450    0.390    0.130    0.410    2.250     7.13    0.510    0.060    0.310    1.130    1.880    0.000

SKATE, LITTLE                    RAJA ERINACEA                     150005    AREA- NORTH ATLANTIC       SITE- N3    LIVER

LENGTH       NUM   1   MEAN      0.455   S. D.      0.000   LOW       0.455   HIGH      0.455
WEIGHT       NUM   0   MEAN      0.000   S. D.      0.000   LOW       0.000   HIGH      0.000
            MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
                PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER         0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
N DET.         0000     0000     0000     0000     0000     0000     0001     0000     0000     0000     0000     0000     0000     0000     0000
MEAN          0.040    0.750    0.890   13.975    1.230    0.030    0.000    0.750    16.25    0.430    0.880    0.380    1.190    0.440    0.560
S. D.         0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
LOW           0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
HIGH          0.040    0.750    0.890   13.975    1.230    0.030    0.000    0.750    16.25    0.430    0.880    0.380    1.190    0.440    0.560
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                                             TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                REPORT   MF17
                                            IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                           BY TISSUE AND LOCATION


 SKATE, LITTLE                  RAJA ERINACEA                          150005   AREA- NORTH ATLANTIC      SITE- 01   MUSCLE

LENGTH     NUM    3   MEAN          0.453   S. D.       0.037   LOW       0.415   HIGH        0.488
WEIGHT     NUM    3   MEAN          0.584   S. D.       0.152   LOW       0.422   HIGH        0.724
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM     PPM

NUMBER     0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0002    0002    0000    0002    0000
MEAN      0.237   0.425   0.080  25.300   0.773   0.042   0.380   0.303    6.40   0.280   0.530   0.630   0.317   0.310   0.719
S. D.     0.110   0.066   0.010  17.161   0.127   0.003   0.130   0.100    0.20   0.061   0.000   0.000   0.072   0.000   0.306
LOW       0.150   0.375   0.070  13.600   0.690   0.040   0.250   0.200    6.25   0.240   0.000   0.000   0.270   0.000   0.467
HIGH      0.360   0.500   0.090  45.000   0.920   0.045   0.510   0.400    6.63   0.350   0.530   0.630   0.400   0.310   1.060


 SKATE, LITTLE                  RAJA ERINACEA                          150005   AREA- NORTH ATLANTIC      SITE- 02   MUSCLE

LENGTH     NUM   10   MEAN          0.472   S. D.       0.056   LOW       0.424   HIGH        0.615
WEIGHT     NUM   10   MEAN          0.779   S. D.       0.506   LOW       0.438   HIGH        2.182
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM     PPM

NUMBER     0010    0010    0010    0010    0010    0010    0009    0009    0010    0010    0010    0010    0010    0010    0009
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0008    0008    0000    0008    0000
MEAN      0.107   0.547   0.073  16.522   0.585   0.063   0.312   0.419    7.48   0.459   0.125   0.095   0.578   0.250   0.666
S. D.     0.041   0.356   0.013   7.354   0.208   0.020   0.097   0.076    1.77   0.159   0.049   0.049   0.423   0.000   0.285
LOW       0.055   0.190   0.060   8.150   0.330   0.030   0.190   0.280    5.50   0.210   0.090   0.060   0.130   0.250   0.310
HIGH      0.190   1.380   0.095  32.740   0.920   0.090   0.500   0.510   11.22   0.810   0.160   0.130   1.390   0.250   1.170


 SKATE, LITTLE                  RAJA ERINACEA                          150005   AREA- NORTH ATLANTIC      SITE- 03   MUSCLE

LENGTH     NUM    3   MEAN          0.461   S. D.       0.020   LOW       0.442   HIGH        0.482
WEIGHT     NUM    3   MEAN          0.525   S. D.       0.081   LOW       0.434   HIGH        0.590
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM     PPM

NUMBER     0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003    0003
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0002    0003    0000    0003    0000
MEAN      0.060   0.417   0.077  10.250   0.720   0.040   0.310   0.353    5.86   0.550   0.190   0.000   0.480   0.000   0.940
S. D.     0.010   0.185   0.015   1.602   0.131   0.010   0.166   0.049    1.23   0.226   0.000   0.000   0.563   0.000   0.537
LOW       0.050   0.310   0.060   8.400   0.570   0.030   0.190   0.320    4.44   0.400   0.000   0.000   0.130   0.000   0.630
HIGH      0.070   0.630   0.090  11.200   0.810   0.050   0.500   0.410    6.69   0.810   0.190   0.000   1.130   0.000   1.560


 SKATE, LITTLE                  RAJA ERINACEA                          150005   AREA- NORTH ATLANTIC      SITE- P1   MUSCLE

LENGTH     NUM    7   MEAN          0.456   S. D.       0.014   LOW       0.444   HIGH        0.475
WEIGHT     NUM    7   MEAN          0.567   S. D.       0.047   LOW       0.521   HIGH        0.631
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM     PPM

NUMBER     0007    0007    0007    0007    0007    0007    0007    0007    0007    0007    0007    0007    0006    0007    0007
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0004    0004    0000    0003    0000
MEAN      0.110   0.607   0.084  13.939   0.767   0.057   0.205   0.297    9.18   0.335   0.203   0.327   0.335   1.145   0.853
S. D.     0.040   0.303   0.018   6.968   0.347   0.034   0.086   0.136    3.07   0.136   0.064   0.119   0.201   0.654   0.394
LOW       0.060   0.300   0.060   4.260   0.450   0.020   0.060   0.080    4.00   0.140   0.130   0.190   0.130   0.380   0.310
HIGH      0.160   1.190   0.110  26.850   1.520   0.110   0.310   0.430   13.56   0.510   0.250   0.410   0.640   1.880   1.440


 SKATE, LITTLE                  RAJA ERINACEA                          150005   AREA- NORTH ATLANTIC      SITE- P2   MUSCLE

LENGTH     NUM    6   MEAN          0.451   S. D.       0.033   LOW       0.390   HIGH        0.478
WEIGHT     NUM    6   MEAN          0.595   S. D.       0.115   LOW       0.381   HIGH        0.695
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM     PPM

NUMBER     0006    0006    0006    0006    0006    0006    0006    0005    0006    0006    0006    0006    0006    0006    0006
N DET.     0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0004    0003    0000    0004    0000
MEAN      0.154   0.643   0.113  24.077   0.602   0.069   0.372   0.410   10.52   0.418   0.175   0.267   0.782   0.530   0.924
S. D.     0.077   0.239   0.040  10.415   0.294   0.033   0.165   0.119    2.29   0.087   0.021   0.187   0.646   0.396   0.364
LOW       0.040   0.380   0.090  16.500   0.160   0.030   0.220   0.270    7.44   0.250   0.160   0.130   0.310   0.250   0.630
HIGH      0.230   1.000   0.190  45.000   0.980   0.110   0.630   0.600   13.13   0.480   0.190   0.480   2.070   0.810   1.470


 SKATE, WINTER                  RAJA OCELLATA                          150012   AREA- NORTH ATLANTIC      SITE- I7   MUSCLE

LENGTH     NUM    1   MEAN          0.730   S. D.       0.000   LOW       0.730   HIGH        0.730
WEIGHT     NUM    0   MEAN          0.000   S. D.       0.000   LOW       0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM     PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.     0000    0000    0000    0000    0000    0001    0000    0000    0000    0000    0001    0001    0000    0000    0000
MEAN      0.205   0.376   0.070  12.700   0.440   0.000   0.325   0.230    7.30   0.110   0.000   0.000   0.135   1.800   0.300
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH      0.205   0.376   0.070  12.700   0.440   0.000   0.325   0.230    7.30   0.110   0.000   0.000   0.135   1.800   0.300


 SKATE, WINTER                  RAJA OCELLATA                          150012   AREA- NORTH ATLANTIC      SITE- I7   LIVER

LENGTH     NUM    1   MEAN          0.730   S. D.       0.000   LOW       0.730   HIGH        0.730
WEIGHT     NUM    0   MEAN          0.000   S. D.       0.000   LOW       0.000   HIGH        0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM      PPM     PPM     PPM

NUMBER     0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.     0001    0000    0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0000    0000    0000
MEAN      0.000   0.650   0.210   4.500   1.450   0.180   0.400   5.710   19.30   0.890   0.300   0.000   0.640   1.250   0.300
S. D.     0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW       0.000   0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH      0.000   0.650   0.210   4.500   1.450   0.180   0.400   5.710   19.30   0.890   0.300   0.000   0.640   1.250   0.300
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SKATE, WINTER RAJA OCELLATA 150012 AREA- NORTH ATLANTIC SITE- N2 MUSCLE

LENGTH NUM 1 MEAN 0.397 S. D. 0.000 LOW 0.397 HIGH 0.397
WEIGHT NUM 1 MEAN 0.832 S. D. 0.000 LOW 0.832 HIGH 0.832

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.180	1.500	0.130	13.875	0.730	0.080	0.250	0.360	6.60	0.390	0.120	0.440	2.000	1.310	1.120
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.180	1.500	0.130	13.875	0.730	0.080	0.250	0.360	6.60	0.390	0.120	0.440	2.000	1.310	1.120

EULACHON THALEICHTHYS PACIFICUS 153009 AREA- PACIFIC NORTHWEST SITE- G9 WHOLE

LENGTH NUM 10 MEAN 0.159 S. D. 0.035 LOW 0.100 HIGH 0.190
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0009	0000	0000	0000	0000	0000	0001	0000	0000	0000	0002	0004	0000	0003	0000
MEAN	0.010	0.621	0.109	2.686	0.445	0.054	0.216	1.022	11.73	0.370	0.176	0.340	0.545	0.944	1.372
S. D.	0.000	0.236	0.061	0.861	0.128	0.018	0.075	0.315	1.95	0.164	0.090	0.230	0.094	0.527	0.491
LOW	0.000	0.360	0.030	1.286	0.300	0.030	0.123	0.670	7.81	0.190	0.060	0.050	0.420	0.250	0.800
HIGH	0.010	1.060	0.210	4.100	0.670	0.080	0.330	1.710	14.46	0.720	0.310	0.620	0.710	1.650	2.590

EULACHON THALEICHTHYS PACIFICUS 153009 AREA- PACIFIC NORTHWEST SITE- M2 WHOLE

LENGTH NUM 7 MEAN 0.155 S. D. 0.013 LOW 0.125 HIGH 0.160
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0006	0000	0002	0000	0000	0004	0000	0000	0000	0001	0002	0004	0000	0002	0000
MEAN	0.020	0.782	0.094	2.730	0.337	0.128	0.182	0.803	13.48	0.391	0.148	0.267	0.659	1.606	1.011
S. D.	0.000	0.389	0.044	1.302	0.150	0.110	0.096	0.169	4.01	0.151	0.063	0.076	0.446	0.471	0.423
LOW	0.000	0.350	0.042	0.500	0.180	0.060	0.070	0.530	8.93	0.220	0.050	0.200	0.250	1.050	0.550
HIGH	0.020	1.500	0.145	3.700	0.590	0.255	0.296	1.075	20.20	0.640	0.220	0.350	1.580	2.250	1.775

EULACHON THALEICHTHYS PACIFICUS 153009 AREA- PACIFIC NORTHWEST SITE- M5 WHOLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0001	0002	0003	0000	0000	0000
MEAN	0.060	0.806	0.215	2.745	0.410	0.040	0.383	0.843	9.68	0.430	0.150	0.000	0.503	1.223	0.830
S. D.	0.071	0.654	0.234	0.261	0.170	0.000	0.271	0.251	2.76	0.000	0.000	0.000	0.172	0.240	0.199
LOW	0.010	0.350	0.070	2.475	0.240	0.040	0.150	0.605	6.55	0.430	0.000	0.000	0.320	1.070	0.600
HIGH	0.110	1.555	0.485	2.995	0.580	0.040	0.680	1.105	11.78	0.430	0.150	0.000	0.660	1.500	0.950

EULACHON THALEICHTHYS PACIFICUS 153009 AREA- PACIFIC NORTHWEST SITE- M8 WHOLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.100	0.677	0.100	2.309	0.254	0.200	0.186	0.935	13.72	0.371	0.168	0.410	0.450	0.875	0.975
S. D.	0.000	0.112	0.042	0.313	0.182	0.000	0.056	0.233	0.21	0.162	0.067	0.297	0.170	0.000	0.403
LOW	0.000	0.597	0.070	2.088	0.125	0.000	0.146	0.770	13.57	0.256	0.120	0.200	0.330	0.000	0.690
HIGH	0.100	0.756	0.130	2.530	0.383	0.200	0.225	1.100	13.87	0.485	0.215	0.620	0.570	0.875	1.260

EULACHON THALEICHTHYS PACIFICUS 153009 AREA- PACIFIC NORTHWEST SITE- N4 WHOLE

LENGTH NUM 5 MEAN 0.152 S. D. 0.017 LOW 0.140 HIGH 0.175
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000	0000	0000
MEAN	0.000	0.908	0.079	2.295	0.586	0.045	0.234	0.700	12.25	0.210	0.146	0.525	0.513	0.874	1.324
S. D.	0.000	0.257	0.024	0.788	0.516	0.019	0.061	0.125	2.98	0.058	0.062	0.632	0.120	0.335	0.207
LOW	0.000	0.535	0.060	1.737	0.170	0.030	0.160	0.520	9.63	0.130	0.060	0.090	0.360	0.380	1.000
HIGH	0.000	1.250	0.120	3.540	1.475	0.075	0.310	0.840	16.97	0.285	0.220	1.250	0.655	1.220	1.560

EULACHON THALEICHTHYS PACIFICUS 153009 AREA- PACIFIC NORTHWEST SITE- R2 WHOLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.625	0.060	1.525	0.420	0.080	0.400	1.010	11.19	0.265	0.185	0.130	0.425	1.030	1.260
S. D.	0.000	0.092	0.000	0.177	0.099	0.000	0.297	0.113	1.85	0.007	0.177	0.000	0.021	0.750	0.028
LOW	0.000	0.560	0.060	1.400	0.350	0.080	0.190	0.930	9.88	0.260	0.060	0.000	0.410	0.500	1.240
HIGH	0.000	0.690	0.060	1.650	0.490	0.080	0.610	1.090	12.50	0.270	0.310	0.130	0.440	1.560	1.280

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

REPORT MF17

LOCATION LEVEL 5

EULACHON THALEICHTHYS PACIFICUS 153009 AREA- PACIFIC NORTHWEST SITE- R5 WHOLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0002	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.030	0.956	0.330	2.541	0.748	0.061	0.399	0.986	16.35	0.590	0.140	0.371	0.558	1.488	1.543
S. D.	0.028	0.518	0.321	2.357	0.993	0.014	0.201	0.138	6.86	0.543	0.091	0.118	0.161	0.083	0.507
LOW	0.010	0.430	0.040	0.580	0.140	0.040	0.185	0.855	10.44	0.225	0.060	0.215	0.435	1.400	0.880
HIGH	0.050	1.630	0.780	5.155	2.226	0.070	0.660	1.180	25.71	1.390	0.270	0.500	0.780	1.565	2.000

SNAPPER, BLACKFIN LUTJANUS BUCCANELLA 155005 AREA- GULF SITE- U8 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0012	0013	0011	0011	0013	0013	0013	0013	0013	0013	0013	0013	0013	0012
N DET.	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000	0008	0008	0000	0001	0000
MEAN	0.262	0.466	0.072	3.328	0.741	0.044	0.131	0.298	2.74	0.275	0.164	0.186	0.074	0.822	0.620
S. D.	0.056	0.294	0.019	1.962	0.178	0.020	0.095	0.221	0.95	0.192	0.082	0.118	0.025	0.419	0.304
LOW	0.200	0.250	0.050	1.440	0.525	0.020	0.040	0.130	0.94	0.050	0.050	0.060	0.035	0.190	0.130
HIGH	0.380	1.310	0.110	7.270	1.000	0.090	0.320	0.930	4.87	0.830	0.250	0.310	0.110	1.620	1.250

SNAPPER, RED LUTJANUS CAMPECHANUS 155006 AREA- SOUTH ATLANTIC SITE- J1 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0009	0009	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0003	0001	0000	0004	0000	0002	0000	0000	0006	0008	0001	0003	0000
MEAN	0.371	0.334	0.054	3.729	0.548	0.032	0.288	0.209	3.04	0.258	0.153	0.265	0.080	0.855	0.526
S. D.	0.201	0.169	0.034	1.553	0.196	0.012	0.265	0.054	0.54	0.175	0.093	0.247	0.060	0.405	0.193
LOW	0.170	0.150	0.035	2.440	0.300	0.020	0.050	0.130	2.44	0.080	0.060	0.090	0.010	0.295	0.300
HIGH	0.790	0.690	0.130	6.900	0.885	0.050	0.970	0.285	3.80	0.570	0.280	0.440	0.210	1.470	0.995

SNAPPER, RED LUTJANUS CAMPECHANUS 155006 AREA- GULF SITE- MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0001	0004	0000	0000	0001	0000	0000	0000	0002	0007	0006	0000	0003	0000
MEAN	0.423	0.475	0.093	3.406	0.741	0.038	0.151	0.236	5.71	0.196	0.403	0.246	0.055	0.842	0.546
S. D.	0.260	0.409	0.040	1.935	0.178	0.029	0.072	0.091	1.39	0.056	0.419	0.221	0.014	0.250	0.105
LOW	0.170	0.100	0.040	1.400	0.430	0.010	0.060	0.160	3.50	0.125	0.060	0.060	0.040	0.450	0.400
HIGH	0.855	1.310	0.150	6.250	1.060	0.110	0.280	0.465	8.25	0.270	0.870	0.495	0.080	1.250	0.690

SNAPPER, RED LUTJANUS CAMPECHANUS 155006 AREA- GULF SITE- B8 MUSCLE

LENGTH NUM 8 MEAN 0.591 S. D. 0.163 LOW 0.343 HIGH 0.737
WEIGHT NUM 8 MEAN 4.107 S. D. 2.448 LOW 0.851 HIGH 6.356

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0007	0007	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0000	0000	0005	0000	0000	0005	0000	0000	0000	0002	0007	0008	0001	0003	0000
MEAN	0.263	0.495	0.117	2.515	0.986	0.045	0.270	0.236	3.84	0.218	0.200	0.000	0.096	1.141	0.465
S. D.	0.127	0.261	0.040	1.527	0.275	0.022	0.159	0.072	1.36	0.027	0.000	0.000	0.048	0.832	0.120
LOW	0.110	0.200	0.070	0.840	0.610	0.030	0.150	0.110	2.03	0.185	0.000	0.000	0.040	0.330	0.300
HIGH	0.490	0.880	0.140	4.560	1.290	0.070	0.605	0.360	6.43	0.250	0.200	0.000	0.160	2.350	0.630

SNAPPER, RED LUTJANUS CAMPECHANUS 155006 AREA- GULF SITE- H1 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0008	0008	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0001	0000	0000	0001	0000	0000	0000	0010	0010	0000	0000	0000
MEAN	0.106	0.537	0.076	2.525	0.879	0.030	0.211	0.267	3.35	0.154	0.000	0.000	0.174	0.655	0.491
S. D.	0.041	0.405	0.024	1.571	0.223	0.009	0.197	0.205	1.25	0.047	0.000	0.000	0.196	0.170	0.098
LOW	0.030	0.250	0.040	1.300	0.530	0.010	0.095	0.150	1.70	0.090	0.000	0.000	0.060	0.480	0.380
HIGH	0.175	1.560	0.120	5.600	1.250	0.040	0.690	0.840	6.63	0.240	0.000	0.000	0.720	0.940	0.640

SNAPPER, GRAY (MANGROVE) LUTJANUS GRISEUS 155008 AREA- SOUTH ATLANTIC SITE- J4 MUSCLE

LENGTH NUM 2 MEAN 0.248 S. D. 0.003 LOW 0.246 HIGH 0.250
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0001	0004	0003	0000	0002	0000
MEAN	0.205	0.423	0.088	5.404	0.329	0.043	0.220	0.288	4.03	0.190	0.000	0.090	0.175	1.000	0.535
S. D.	0.071	0.243	0.082	2.145	0.031	0.006	0.118	0.050	1.14	0.044	0.000	0.000	0.112	0.354	0.236
LOW	0.105	0.130	0.040	3.000	0.300	0.040	0.075	0.220	3.31	0.160	0.000	0.000	0.095	0.750	0.350
HIGH	0.260	0.690	0.210	8.215	0.360	0.050	0.356	0.340	5.72	0.240	0.000	0.090	0.340	1.250	0.880

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SNAPPER, GRAY (MANGROVE) LUTJANUS GRISEUS 155008 AREA- SOUTH ATLANTIC SITE- M1 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0008
N DET.	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0010	0009	0000	0001	0000
MEAN	0.233	0.372	0.073	5.163	0.518	0.028	0.323	0.357	4.09	0.205	0.000	0.060	0.101	0.844	0.446
S. D.	0.066	0.161	0.020	2.296	0.276	0.007	0.219	0.158	1.01	0.062	0.000	0.000	0.030	0.218	0.134
LOW	0.130	0.190	0.045	2.050	0.280	0.010	0.130	0.190	3.22	0.100	0.000	0.000	0.040	0.500	0.170
HIGH	0.340	0.690	0.110	7.775	1.200	0.035	0.720	0.750	6.50	0.330	0.000	0.060	0.140	1.130	0.560

SNAPPER, GRAY (MANGROVE) LUTJANUS GRISEUS 155008 AREA- SOUTH ATLANTIC SITE- M4 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0010	0000	0001	0000
MEAN	0.256	0.745	0.086	2.654	0.384	0.027	0.383	0.365	3.63	0.202	0.310	0.000	0.134	0.747	0.450
S. D.	0.087	0.665	0.044	1.088	0.145	0.011	0.469	0.121	0.65	0.059	0.000	0.000	0.090	0.220	0.137
LOW	0.150	0.190	0.030	1.000	0.230	0.010	0.120	0.200	2.81	0.110	0.000	0.000	0.070	0.500	0.190
HIGH	0.420	2.440	0.200	4.000	0.630	0.045	1.560	0.655	4.75	0.310	0.310	0.000	0.360	1.250	0.630

SNAPPER, GRAY (MANGROVE) LUTJANUS GRISEUS 155008 AREA- GULF SITE- L9 MUSCLE

LENGTH NUM 4 MEAN 0.353 S. D. 0.064 LOW 0.288 HIGH 0.440
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0003	0003	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0000	0001	0001	0000	0000	0002	0000	0000	0000	0002	0002	0002	0000	0001	0000
MEAN	0.225	0.444	0.091	4.402	0.565	0.040	0.139	0.387	5.35	0.248	0.485	0.225	0.140	0.800	0.406
S. D.	0.081	0.191	0.032	1.982	0.201	0.000	0.085	0.039	1.33	0.025	0.332	0.049	0.040	0.626	0.166
LOW	0.175	0.265	0.055	2.727	0.336	0.040	0.050	0.365	4.46	0.230	0.250	0.190	0.105	0.190	0.200
HIGH	0.346	0.646	0.115	6.590	0.710	0.040	0.252	0.445	7.32	0.265	0.720	0.260	0.190	1.440	0.600

SNAPPER, YELLOWTAIL OCYURUS CHRYSURUS 155013 AREA- SOUTH ATLANTIC SITE- M1 MUSCLE

LENGTH NUM 2 MEAN 0.408 S. D. 0.008 LOW 0.402 HIGH 0.414
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0023	0022	0023	0023	0022	0023	0021	0023	0023	0022	0023	0023	0023	0023	0022
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0020	0022	0000	0003	0000
MEAN	0.107	0.458	0.079	2.551	0.968	0.034	0.225	0.264	3.95	0.194	0.210	0.190	0.099	0.804	0.518
S. D.	0.060	0.271	0.027	1.427	0.672	0.027	0.195	0.126	0.98	0.061	0.035	0.000	0.037	0.176	0.269
LOW	0.020	0.130	0.040	0.400	0.380	0.010	0.060	0.030	2.69	0.110	0.190	0.000	0.050	0.500	0.250
HIGH	0.240	1.310	0.145	6.150	3.730	0.145	0.940	0.576	7.32	0.345	0.250	0.190	0.220	1.130	1.610

SNAPPER, YELLOWTAIL OCYURUS CHRYSURUS 155013 AREA- GULF SITE- L9 MUSCLE

LENGTH NUM 10 MEAN 0.310 S. D. 0.000 LOW 0.310 HIGH 0.310
WEIGHT NUM 10 MEAN 0.454 S. D. 0.000 LOW 0.454 HIGH 0.454

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0008	0008	0000	0002	0000
MEAN	0.165	0.232	0.059	2.053	0.834	0.048	0.279	0.361	3.68	0.192	0.190	0.345	0.077	0.636	0.640
S. D.	0.049	0.116	0.013	1.260	0.219	0.029	0.251	0.145	0.94	0.066	0.014	0.262	0.015	0.390	0.210
LOW	0.110	0.110	0.030	0.800	0.460	0.020	0.060	0.200	2.69	0.080	0.180	0.160	0.060	0.250	0.390
HIGH	0.270	0.440	0.075	4.650	1.190	0.110	0.810	0.690	5.44	0.290	0.200	0.530	0.105	1.440	0.910

SNAPPER, YELLOWTAIL OCYURUS CHRYSURUS 155013 AREA- GULF SITE- R6 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0002	0000	0000	0003	0000	0000	0000	0000	0007	0006	0000	0001	0000
MEAN	0.108	0.420	0.060	3.293	0.760	0.040	0.193	0.289	4.22	0.237	0.190	0.279	0.077	0.843	0.563
S. D.	0.043	0.149	0.043	1.660	0.343	0.021	0.117	0.098	1.57	0.138	0.090	0.173	0.029	0.215	0.197
LOW	0.030	0.212	0.030	0.600	0.150	0.020	0.020	0.110	2.19	0.070	0.100	0.060	0.030	0.595	0.365
HIGH	0.165	0.630	0.160	5.475	1.510	0.070	0.373	0.410	7.01	0.500	0.280	0.480	0.120	1.265	0.940

SNAPPER, VERMILION RHOMBOPLITES AURORUBENS 155015 AREA- SITE- B9 LIVER

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 0.402 S. D. 0.000 LOW 0.402 HIGH 0.402

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.020	0.440	5.190	5.800	2.000	0.030	0.310	2.560	185.94	1.950	0.190	0.130	0.790	0.000	0.940
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.440	5.190	5.800	2.000	0.030	0.310	2.560	185.94	1.950	0.190	0.130	0.790	0.000	0.940

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES:
BY TISSUE AND LOCATION

LOCATION LEVEL 5

NAPPER, VERMILION RHOMBOPLITES AURORUBENS 155015 AREA- SOUTH ATLANTIC SITE- B8 MUSCLE

NGTH	NUM	4	MEAN	0.293	S. D.	0.018	LOW	0.269	HIGH	0.312
EIGHT	NUM	4	MEAN	0.378	S. D.	0.064	LOW	0.304	HIGH	0.445

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
MBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
DET.	0000	0000	0001	0000	0000	0002	0000	0000	0000	0000	0002	0003	0000	0001	0000
AN	0.083	0.436	0.038	3.086	0.740	0.033	0.239	0.124	2.98	0.313	0.700	0.620	0.103	1.092	0.633
S. D.	0.052	0.092	0.008	0.999	0.239	0.032	0.123	0.038	0.56	0.203	0.594	0.000	0.031	0.187	0.106
LOW	0.025	0.343	0.030	2.433	0.415	0.010	0.130	0.070	2.50	0.090	0.280	0.000	0.070	0.890	0.500
HIGH	0.145	0.560	0.045	4.575	0.985	0.055	0.415	0.160	3.66	0.530	1.120	0.620	0.140	1.260	0.745

SNAPPER, VERMILION RHOMBOPLITES AURORUBENS 155015 AREA- SOUTH ATLANTIC SITE- B9 MUSCLE

LENGTH	NUM	1	MEAN	0.270	S. D.	0.000	LOW	0.270	HIGH	0.270
WEIGHT	NUM	6	MEAN	0.535	S. D.	0.266	LOW	0.142	HIGH	0.908

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
DET.	0000	0001	0002	0000	0000	0005	0001	0000	0000	0003	0007	0007	0000	0002	0000
MEAN	0.072	0.488	0.083	3.279	1.433	0.040	0.187	0.335	3.87	0.239	0.705	0.217	0.109	0.833	0.537
S. D.	0.029	0.215	0.055	1.506	1.977	0.021	0.102	0.131	1.08	0.184	0.374	0.134	0.049	0.201	0.183
LOW	0.020	0.190	0.020	0.800	0.410	0.010	0.040	0.200	2.46	0.040	0.395	0.120	0.030	0.605	0.365
IGH	0.115	0.810	0.180	5.740	6.675	0.070	0.330	0.640	6.43	0.570	1.120	0.370	0.190	1.100	0.870

SNAPPER, VERMILION RHOMBOPLITES AURORUBENS 155015 AREA- SOUTH ATLANTIC SITE- C2 MUSCLE

LENGTH	NUM	20	MEAN	0.500	S. D.	0.058	LOW	0.419	HIGH	0.593
EIGHT	NUM	20	MEAN	1.682	S. D.	0.642	LOW	0.936	HIGH	2.724

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0018
N DET.	0000	0000	0001	0000	0001	0005	0000	0000	0000	0001	0017	0015	0000	0004	0000
MEAN	0.148	0.465	0.088	2.988	0.763	0.037	0.210	0.290	3.26	0.214	0.187	0.284	0.078	0.715	0.512
. D.	0.083	0.274	0.033	1.241	0.240	0.017	0.116	0.091	0.83	0.106	0.031	0.195	0.022	0.275	0.133
OW	0.030	0.100	0.035	1.150	0.360	0.020	0.060	0.105	2.11	0.070	0.160	0.110	0.040	0.250	0.350
IGH	0.340	1.250	0.140	5.500	1.380	0.090	0.440	0.465	5.94	0.530	0.220	0.620	0.120	1.060	0.815

SNAPPER, VERMILION RHOMBOPLITES AURORUBENS 155015 AREA- SOUTH ATLANTIC SITE- C2 LIVER

ENGTH	NUM	1	MEAN	0.462	S. D.	0.000	LOW	0.462	HIGH	0.462
EIGHT	NUM	1	MEAN	1.224	S. D.	0.000	LOW	1.224	HIGH	1.224

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.340	0.630	2.940	2.800	2.150	0.050	0.130	10.500	164.06	0.390	0.000	1.190	0.870	0.660	0.810
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.340	0.630	2.940	2.800	2.150	0.050	0.130	10.500	164.06	0.390	0.000	1.190	0.870	0.660	0.810

SNAPPER, VERMILION RHOMBOPLITES AURORUBENS 155015 AREA- SOUTH ATLANTIC SITE- C4 MUSCLE

LENGTH	NUM	2	MEAN	0.161	S. D.	0.007	LOW	0.156	HIGH	0.166
WEIGHT	NUM	2	MEAN	0.068	S. D.	0.010	LOW	0.061	HIGH	0.075

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0001	0000	0000	0002	0000	0000	0000	0001	0002	0002	0000	0001	0000
MEAN	0.030	0.422	0.070	3.418	0.693	0.000	0.213	0.355	3.25	0.395	0.000	0.000	0.178	0.600	0.458
S. D.	0.000	0.030	0.000	0.506	0.329	0.000	0.011	0.120	0.71	0.000	0.000	0.000	0.152	0.000	0.082
LOW	0.000	0.400	0.000	3.060	0.460	0.000	0.205	0.270	2.74	0.000	0.000	0.000	0.070	0.000	0.400
HIGH	0.030	0.443	0.070	3.775	0.925	0.000	0.220	0.440	3.75	0.395	0.000	0.000	0.285	0.600	0.516

SNAPPER, RED (EHU) ETELIS MARCHI 155024 AREA- HAWAII SITE- A8 MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	10	MEAN	1.992	S. D.	0.553	LOW	1.249	HIGH	3.008

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0000	0000	0000	0000	0004	0000	0000	0000	0000	0007	0007	0000	0002	0000
MEAN	0.527	0.499	0.076	10.720	0.836	0.033	0.215	0.291	4.08	0.172	0.280	0.293	0.135	0.906	0.688
S. D.	0.084	0.233	0.037	4.273	0.351	0.023	0.238	0.139	0.83	0.102	0.197	0.291	0.094	0.354	0.237
LOW	0.365	0.185	0.030	6.000	0.355	0.010	0.037	0.115	2.52	0.040	0.120	0.060	0.040	0.440	0.325
HIGH	0.630	0.800	0.140	20.805	1.555	0.070	0.786	0.635	5.17	0.360	0.500	0.620	0.320	1.430	1.130

SNAPPER, RED (EHU) ETELIS MARCHI 155024 AREA- HAWAII SITE- C6 MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	18	MEAN	2.096	S. D.	0.519	LOW	1.474	HIGH	3.178

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0018	0017	0018	0017	0017	0018	0018	0018	0018	0018	0018	0018	0018	0018	0015
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0017	0015	0000	0003	0000
MEAN	0.522	0.359	0.068	6.796	0.642	0.028	0.301	0.328	3.28	0.180	0.240	0.273	0.096	0.498	0.744
S. D.	0.230	0.122	0.020	5.395	0.220	0.008	0.292	0.075	0.81	0.091	0.000	0.144	0.028	0.167	0.388
LOW	0.160	0.190	0.030	0.620	0.080	0.010	0.020	0.210	1.25	0.040	0.000	0.190	0.060	0.250	0.280
HIGH	0.930	0.630	0.110	19.500	0.930	0.040	0.940	0.470	4.31	0.430	0.240	0.440	0.160	0.850	1.730

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                                          TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                  REPORT
                                         IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                        BY TISSUE AND LOCATION


 SNAPPER, RED (EHU)              ETELIS MARCHI                      155024   AREA- HAWAII                 SITE- D6    MUSCLE

LENGTH     NUM    0    MEAN        0.000    S. D.      0.000    LOW      0.000    HIGH        0.000
WEIGHT     NUM   12    MEAN        1.897    S. D.      0.461    LOW      1.247    HIGH        2.778
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM   MANG  ANTIMONY   TI
            PPM     PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM      PP

NUMBER     0012    0012    0012    0011    0012    0012     0011     0012    0012    0012       0012    0012    0012    0012
N DET.     0000    0000    0000    0000    0000    0000     0000     0000    0000    0000       0011    0011    0000    0001
MEAN      0.478   0.400   0.074   4.496   0.724   0.029    0.156    0.312    2.96   0.225      0.250   0.970   0.100   0.613    0.
S. D.     0.148   0.308   0.030   2.391   0.404   0.007    0.080    0.107    0.89   0.117      0.000   0.000   0.040   0.145    0.2
LOW       0.290   0.060   0.040   1.080   0.100   0.010    0.050    0.120    0.94   0.060      0.000   0.000   0.060   0.310    0.2
HIGH      0.850   1.190   0.150   8.250   1.340   0.040    0.280    0.500    4.38   0.500      0.250   0.970   0.200   0.810    0.


 SNAPPER, GRAY                   APRION VIRESCENS                   155025   AREA- HAWAII                 SITE- C6    MUSCLE

LENGTH     NUM    0    MEAN        0.000    S. D.      0.000    LOW      0.000    HIGH        0.000
WEIGHT     NUM   10    MEAN        3.263    S. D.      0.281    LOW      2.920    HIGH        3.686
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM   MANG  ANTIMONY   T
            PPM     PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM      P

NUMBER     0010    0010    0010    0010    0010    0010     0009     0010    0010    0009       0010    0010    0010    0010     0
N DET.     0000    0000    0000    0000    0000    0001     0001     0000    0000    0000       0005    0007    0000    0001     00
MEAN      0.341   0.438   0.064   4.886   1.800   0.031    0.125    0.280    3.22   0.213      0.228   0.397   0.082   0.896    0.4
S. D.     0.073   0.173   0.027   2.698   2.288   0.011    0.062    0.156    0.75   0.107      0.229   0.195   0.030   0.337    0.1
LOW       0.230   0.070   0.040   1.962   0.350   0.010    0.050    0.040    2.11   0.075      0.060   0.260   0.040   0.430    0.
HIGH      0.470   0.750   0.110  10.250   6.933   0.040    0.190    0.485    4.64   0.450      0.630   0.620   0.135   1.430    0.


 SNAPPER, GRAY                   APRION VIRESCENS                   155025   AREA- HAWAII                 SITE- D6    MUSCLE

LENGTH     NUM    0    MEAN        0.000    S. D.      0.000    LOW      0.000    HIGH        0.000
WEIGHT     NUM    4    MEAN        2.015    S. D.      0.057    LOW      1.929    HIGH        2.043
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM   MANG  ANTIMONY   TI
            PPM     PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM      PP

NUMBER     0004    0004    0004    0004    0004    0004     0004     0004    0004    0004       0004    0004    0004    0004     00
N DET.     0000    0000    0000    0000    0000    0000     0000     0000    0000    0000       0004    0004    0000    0000     00
MEAN      0.296   0.718   0.118   6.018   0.508   0.028    0.736    0.338    3.53   0.210      0.000   0.000   0.123   0.829    0.4
S. D.     0.131   0.810   0.069   3.155   0.303   0.010    0.677    0.124    0.36   0.029      0.000   0.000   0.050   0.234    0.1
LOW       0.175   0.250   0.060   2.420   0.280   0.020    0.125    0.230    3.06   0.180      0.000   0.000   0.070   0.625    0.3
HIGH      0.450   1.930   0.200   9.450   0.950   0.040    1.440    0.510    3.94   0.250      0.000   0.000   0.170   1.060    0.6


 SNAPPER, GRAY                   APRION VIRESCENS                   155025   AREA- HAWAII                 SITE- D9    MUSCLE

LENGTH     NUM    0    MEAN        0.000    S. D.      0.000    LOW      0.000    HIGH        0.000
WEIGHT     NUM   26    MEAN        2.401    S. D.      0.456    LOW      1.475    HIGH        3.064
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM   MANG  ANTIMONY   TI
            PPM     PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM      PP

NUMBER     0025    0025    0026    0025    0026    0026     0025     0026    0025    0026       0026    0026    0026    0026     00
N DET.     0000    0000    0000    0000    0000    0001     0002     0000    0000    0000       0024    0025    0000    0001     00
MEAN      0.359   0.584   0.086   3.370   0.600   0.028    0.390    0.281    3.06   0.186      0.140   0.250   0.125   0.702    0.6
S. D.     0.226   0.610   0.037   1.985   0.198   0.008    0.524    0.167    0.51   0.053      0.071   0.000   0.063   0.268    0.3
LOW       0.100   0.130   0.030   0.500   0.220   0.010    0.060    0.080    2.19   0.100      0.090   0.000   0.060   0.310    0.3
HIGH      1.000   3.250   0.220   8.150   1.030   0.040    2.060    0.880    4.25   0.280      0.190   0.250   0.390   1.440    1.9


 SNOOK                           CENTROPOMUS UNDECIMALIS            157004   AREA- GULF                   SITE- L2    MUSCLE

LENGTH     NUM    0    MEAN        0.000    S. D.      0.000    LOW      0.000    HIGH        0.000
WEIGHT     NUM    1    MEAN        3.108    S. D.      0.000    LOW      3.108    HIGH        3.108
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM   MANG  ANTIMONY   TI
            PPM     PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM      PP

NUMBER     0001    0001    0001    0001    0001    0001     0001     0001    0001    0001       0001    0001    0001    0001     00
N DET.     0000    0000    0000    0000    0000    0000     0000     0000    0000    0000       0001    0000    0000    0000     00
MEAN      1.050   0.440   0.100   1.500   0.490   0.030    0.150    0.190    4.31   0.150      0.000   0.060   0.090   0.560    0.5
S. D.     0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.000    0.00   0.000      0.000   0.000   0.000   0.000    0.0
LOW       0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.000    0.00   0.000      0.000   0.000   0.000   0.000    0.0
HIGH      1.050   0.440   0.100   1.500   0.490   0.030    0.150    0.190    4.31   0.150      0.000   0.060   0.090   0.560    0.5


 SNOOK                           CENTROPOMUS UNDECIMALIS            157004   AREA- GULF                   SITE- L5    MUSCLE

LENGTH     NUM    1    MEAN        0.750    S. D.      0.000    LOW      0.750    HIGH        0.750
WEIGHT     NUM    1    MEAN        4.486    S. D.      0.000    LOW      4.486    HIGH        4.486
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM   MANG  ANTIMONY   TI
            PPM     PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM      PP

NUMBER     0001    0001    0001    0001    0001    0001     0001     0001    0001    0001       0001    0001    0001    0001     00
N DET.     0000    0000    0000    0000    0000    0000     0000     0000    0000    0000       0001    0001    0000    0000     00
MEAN      0.630   0.810   0.130   9.250   0.520   0.060    0.380    0.080    4.63   0.290      0.000   0.000   0.190   0.810    0.2
S. D.     0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.000    0.00   0.000      0.000   0.000   0.000   0.000    0.0
LOW       0.000   0.000   0.000   0.000   0.000   0.000    0.000    0.000    0.00   0.000      0.000   0.000   0.000   0.000    0.0
HIGH      0.630   0.810   0.130   9.250   0.520   0.060    0.380    0.080    4.63   0.290      0.000   0.000   0.190   0.810    0.2


 SNOOK                           CENTROPOMUS UNDECIMALIS            157004   AREA- GULF                   SITE- L9    MUSCLE

LENGTH     NUM    0    MEAN        0.000    S. D.      0.000    LOW      0.000    HIGH        0.000
WEIGHT     NUM    0    MEAN        0.000    S. D.      0.000    LOW      0.000    HIGH        0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM   MANG  ANTIMONY   TI
            PPM     PPM     PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM      PP

NUMBER     0010    0010    0010    0010    0010    0010     0010     0010    0010    0010       0010    0010    0010    0010     00
N DET.     0000    0000    0000    0000    0000    0000     0000     0000    0000    0000       0005    0006    0000    0001     00
MEAN      0.681   0.293   0.046   2.878   0.695   0.030    0.247    0.194    4.01   0.180      0.140   0.133   0.066   0.684    0.4
S. D.     0.538   0.110   0.010   1.193   0.271   0.012    0.214    0.070    0.94   0.047      0.131   0.085   0.027   0.361    0.1
LOW       0.250   0.185   0.030   0.765   0.330   0.010    0.055    0.060    2.69   0.090      0.060   0.060   0.040   0.060    0.2
HIGH      1.640   0.560   0.060   5.183   1.060   0.055    0.620    0.300    5.44   0.240      0.370   0.220   0.115   1.130    0.8
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

MEMPACHI   MYRIPRISTIS ARGYROMUS   162012   AREA- HAWAII   SITE- C6   MUSCLE

ENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 5   MEAN 0.292   S. D. 0.009   LOW 0.283   HIGH 0.305

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
DET.	0000	0001	0002	0000	0000	0004	0001	0000	0000	0002	0005	0005	0001	0004	0000
EAN	0.124	0.476	0.110	8.644	0.696	0.030	0.114	0.260	2.79	0.380	0.000	0.000	0.145	0.980	0.558
S. D.	0.029	0.199	0.070	2.760	0.228	0.000	0.069	0.074	0.48	0.126	0.000	0.000	0.076	0.000	0.125
LOW	0.090	0.300	0.040	5.840	0.540	0.000	0.050	0.140	2.30	0.235	0.000	0.000	0.070	0.000	0.465
HIGH	0.160	0.745	0.180	12.970	1.085	0.030	0.210	0.340	3.57	0.460	0.000	0.000	0.245	0.980	0.775

MEMPACHI   MYRIPRISTIS ARGYROMUS   162012   AREA- HAWAII   SITE- H4   MUSCLE

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 15   MEAN 0.292   S. D. 0.034   LOW 0.231   HIGH 0.357

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0015	0015	0015	0015	0015	0015	0015	0015	0014	0014	0014	0014	0015	0015	0012
N DET.	0000	0002	0001	0000	0000	0003	0000	0000	0000	0001	0008	0010	0001	0004	0000
MEAN	0.105	0.459	0.095	8.913	0.616	0.037	0.154	0.283	2.94	0.257	0.248	0.485	0.114	0.785	0.567
S. D.	0.038	0.203	0.027	5.761	0.237	0.011	0.083	0.099	1.08	0.158	0.146	0.205	0.051	0.187	0.110
LOW	0.060	0.020	0.040	2.700	0.245	0.020	0.030	0.080	1.25	0.040	0.050	0.190	0.075	0.440	0.410
HIGH	0.165	0.810	0.140	20.020	1.080	0.055	0.380	0.480	5.06	0.710	0.380	0.630	0.270	1.060	0.780

MEMPACHI   MYRIPRISTIS ARGYROMUS   162012   AREA- HAWAII   SITE- H4   LIVER

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 1   MEAN 0.286   S. D. 0.000   LOW 0.286   HIGH 0.286

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.850	0.300	21.560	16.950	15.000	0.020	0.130	24.560	242.19	0.360	0.190	0.810	0.640	0.000	0.440
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.850	0.300	21.560	16.950	15.000	0.020	0.130	24.560	242.19	0.360	0.190	0.810	0.640	0.000	0.440

STURGEON, GREEN   ACIPENSER MEDIROSTRIS   166003   AREA- PACIFIC NORTHWEST   SITE- M6   MUSCLE

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 10   MEAN 8.320   S. D. 0.838   LOW 7.303   HIGH 9.911

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0000	0002	0002	0000	0000	0003	0002	0000	0000	0001	0007	0007	0000	0005	0000
MEAN	0.176	0.399	0.083	9.268	0.637	0.034	0.162	0.409	4.23	0.271	0.477	0.290	0.220	0.813	0.481
S. D.	0.087	0.350	0.041	4.112	0.204	0.019	0.094	0.230	1.02	0.236	0.341	0.214	0.069	0.201	0.138
LOW	0.065	0.106	0.020	4.883	0.280	0.010	0.045	0.110	2.86	0.110	0.280	0.120	0.130	0.625	0.300
HIGH	0.315	1.190	0.140	19.100	0.965	0.070	0.280	0.950	5.64	0.710	0.870	0.530	0.340	1.060	0.685

SURFPERCH, BARRED   AMPHISTICHUS ARGENTEUS   168001   AREA- CALIFORNIA   SITE- H3   MUSCLE

LENGTH   NUM 20   MEAN 0.260   S. D. 0.000   LOW 0.260   HIGH 0.260
WEIGHT   NUM 20   MEAN 0.380   S. D. 0.000   LOW 0.380   HIGH 0.380

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0009	0005	0000	0000	0000
MEAN	0.095	0.709	0.094	2.611	0.494	0.052	0.151	0.359	8.37	0.269	0.198	0.311	0.522	0.996	1.203
S. D.	0.040	0.205	0.017	0.766	0.182	0.016	0.072	0.122	1.58	0.055	0.099	0.125	0.179	0.321	1.170
LOW	0.020	0.440	0.065	1.625	0.280	0.030	0.060	0.150	5.38	0.160	0.060	0.160	0.110	0.440	0.500
HIGH	0.170	1.130	0.120	4.312	0.825	0.080	0.380	0.720	11.78	0.350	0.340	0.560	0.870	1.500	5.900

PERCH, SHINER   CYMATOGASTER AGGREGATA   168005   AREA- CALIFORNIA   SITE- F4   WHOLE

LENGTH   NUM 2   MEAN 0.065   S. D. 0.049   LOW 0.030   HIGH 0.100
WEIGHT   NUM 2   MEAN 0.050   S. D. 0.000   LOW 0.050   HIGH 0.050

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	1.093	0.108	1.819	0.560	0.128	0.470	0.713	25.74	0.508	0.390	0.480	1.678	1.870	4.485
S. D.	0.000	0.046	0.018	0.309	0.113	0.046	0.311	0.499	14.43	0.018	0.113	0.028	0.541	0.014	2.227
LOW	0.000	1.060	0.095	1.600	0.480	0.095	0.250	0.360	15.53	0.495	0.310	0.460	1.295	1.860	2.910
HIGH	0.000	1.125	0.120	2.037	0.640	0.160	0.690	1.065	35.94	0.520	0.470	0.500	2.060	1.880	6.060

TILEFISH   LOPHOLATILUS CHAMAELEONTICEPS   174003   AREA- GULF   SITE- D5   MUSCLE

LENGTH   NUM 5   MEAN 0.641   S. D. 0.150   LOW 0.465   HIGH 0.830
WEIGHT   NUM 5   MEAN 3.346   S. D. 2.286   LOW 1.078   HIGH 6.391

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0005	0004	0000	0000	0000
MEAN	1.245	0.435	0.070	12.197	0.907	0.030	0.133	0.157	3.55	0.190	0.000	0.250	0.140	0.576	0.543
S. D.	0.353	0.080	0.013	3.590	0.296	0.008	0.072	0.056	0.43	0.096	0.000	0.000	0.064	0.120	0.137
LOW	1.010	0.375	0.055	6.650	0.450	0.020	0.060	0.060	3.00	0.090	0.000	0.000	0.060	0.440	0.440
HIGH	1.855	0.560	0.085	15.800	1.240	0.040	0.250	0.195	4.20	0.320	0.000	0.250	0.240	0.750	0.780

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

REPORT

TILEFISH   LOPHOLATILUS CHAMAELEONTICEPS   174003   AREA- GULF   SITE- G6   MUSCLE

LENGTH	NUM	41	MEAN	0.815	S. D.	0.103	LOW	0.625	HIGH	0.975
WEIGHT	NUM	41	MEAN	5.517	S. D.	2.189	LOW	1.841	HIGH	8.994

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0055	0055	0055	0054	0054	0055	0054	0055	0055	0055	0055	0055	0055	0055	00
N DET.	0000	0000	0001	0000	0000	0014	0005	0000	0000	0000	0049	0045	0000	0000	00
MEAN	1.471	0.442	0.061	4.342	1.280	0.036	0.098	0.255	4.46	0.215	0.087	0.211	0.118	0.647	0.478
S. D.	0.626	0.129	0.014	2.175	0.444	0.011	0.045	0.117	1.30	0.047	0.032	0.100	0.035	0.171	0.192
LOW	0.650	0.190	0.030	0.625	0.380	0.010	0.040	0.060	1.44	0.080	0.060	0.030	0.045	0.250	0.060
HIGH	3.730	0.750	0.090	13.925	2.250	0.070	0.250	0.630	9.50	0.300	0.130	0.380	0.210	1.000	1.1

SALMON, PINK   ONCORHYNCHUS GORBUSCHA   179016   AREA- ALASKA   SITE- G6   MUSCLE

LENGTH	NUM	10	MEAN	0.458	S. D.	0.024	LOW	0.417	HIGH	0.493
WEIGHT	NUM	10	MEAN	1.510	S. D.	0.293	LOW	1.135	HIGH	1.930

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0009	0010	0010	0009	0009	0009	0009	0009	0009	0009	0009	0009	000
N DET.	0006	0001	0001	0000	0001	0003	0000	0000	0000	0002	0003	0007	0000	0000	0000
MEAN	0.023	0.482	0.076	2.220	0.408	0.035	0.234	0.825	5.44	0.172	0.281	0.580	0.171	0.745	0.776
S. D.	0.013	0.122	0.021	1.080	0.156	0.006	0.158	0.250	1.22	0.058	0.329	0.467	0.069	0.283	0.30
LOW	0.010	0.300	0.040	0.750	0.230	0.026	0.080	0.555	3.57	0.070	0.025	0.250	0.070	0.360	0.60
HIGH	0.040	0.660	0.110	4.710	0.700	0.040	0.505	1.180	7.68	0.230	0.900	0.910	0.285	1.100	1.50

SALMON, PINK   ONCORHYNCHUS GORBUSCHA   179016   AREA- ALASKA   SITE- G6   LIVER

LENGTH	NUM	1	MEAN	0.458	S. D.	0.000	LOW	0.458	HIGH	0.458
WEIGHT	NUM	1	MEAN	1.510	S. D.	0.000	LOW	1.510	HIGH	1.510

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.310	0.510	2.125	1.270	0.040	0.060	18.750	32.50	0.220	0.160	0.000	0.550	0.380	0.63
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.000	0.310	0.510	2.125	1.270	0.040	0.060	18.750	32.50	0.220	0.160	0.000	0.550	0.380	0.63

SALMON, PINK   ONCORHYNCHUS GORBUSCHA   179016   AREA- ALASKA   SITE- O4   MUSCLE

LENGTH	NUM	9	MEAN	0.501	S. D.	0.026	LOW	0.464	HIGH	0.525
WEIGHT	NUM	9	MEAN	1.917	S. D.	0.438	LOW	1.249	HIGH	2.384

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0004	0000	0002	0000	0000	0001	0001	0000	0000	0001	0004	0006	0000	0004	000
MEAN	0.039	0.335	0.080	2.829	0.428	0.037	0.119	0.641	5.33	0.156	0.385	0.320	0.170	0.622	0.655
S. D.	0.025	0.185	0.038	1.755	0.192	0.009	0.032	0.198	1.43	0.085	0.286	0.069	0.065	0.139	0.23
LOW	0.020	0.120	0.050	0.775	0.200	0.020	0.060	0.450	3.57	0.040	0.125	0.280	0.070	0.440	0.400
HIGH	0.080	0.630	0.160	5.100	0.800	0.050	0.166	1.060	8.00	0.290	0.870	0.400	0.260	0.810	1.030

SALMON, PINK   ONCORHYNCHUS GORBUSCHA   179016   AREA- ALASKA   SITE- O4   LIVER

LENGTH	NUM	1	MEAN	0.501	S. D.	0.000	LOW	0.501	HIGH	0.501
WEIGHT	NUM	1	MEAN	1.917	S. D.	0.000	LOW	1.917	HIGH	1.917

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.190	0.360	0.600	1.900	0.000	0.250	23.130	10.00	0.110	0.160	0.000	0.300	0.440	0.690
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.190	0.360	0.600	1.900	0.000	0.250	23.130	10.00	0.110	0.160	0.000	0.300	0.440	0.690

SALMON, PINK   ONCORHYNCHUS GORBUSCHA   179016   AREA- ALASKA   SITE- U1   MUSCLE

LENGTH	NUM	10	MEAN	0.457	S. D.	0.017	LOW	0.432	HIGH	0.486
WEIGHT	NUM	10	MEAN	1.510	S. D.	0.283	LOW	1.135	HIGH	1.930

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0008	0009	0010	0010	0009	0009	0009	0009	0009	0009	0009	0009	0009	0008
N DET.	0008	0000	0000	0002	0000	0000	0001	0000	0000	0000	0005	0004	0000	0001	0000
MEAN	0.015	0.383	0.093	1.894	0.397	0.047	0.179	0.849	5.65	0.311	0.220	0.414	0.179	1.004	0.683
S. D.	0.007	0.100	0.053	1.107	0.160	0.032	0.107	0.272	1.41	0.158	0.156	0.266	0.054	0.588	0.270
LOW	0.010	0.250	0.050	0.400	0.130	0.010	0.080	0.510	3.94	0.190	0.090	0.200	0.070	0.320	0.326
HIGH	0.020	0.500	0.185	3.500	0.600	0.110	0.420	1.440	8.39	0.710	0.440	0.870	0.250	2.110	1.250

SALMON, PINK   ONCORHYNCHUS GORBUSCHA   179016   AREA- ALASKA   SITE- U1   LIVER

LENGTH	NUM	1	MEAN	0.457	S. D.	0.000	LOW	0.457	HIGH	0.457
WEIGHT	NUM	1	MEAN	1.510	S. D.	0.000	LOW	1.510	HIGH	1.510

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	0.250	0.590	0.850	1.470	0.030	0.220	21.500	62.50	0.200	0.870	0.120	0.780	0.810	1.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.250	0.590	0.850	1.470	0.030	0.220	21.500	62.50	0.200	0.870	0.120	0.780	0.810	1.000

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

SALMON, CHUM (KETA) ONCORHYNCHUS KETA 179017 AREA- PACIFIC NORTHWEST SITE- M3 MUSCLE

ENGTH NUM 8 MEAN 0.743 S. D. 0.062 LOW 0.640 HIGH 0.820
EIGHT NUM 8 MEAN 4.331 S. D. 1.656 LOW 1.929 HIGH 6.753

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0007	0008	0008	0007	0007	0008	0007	0008	0008	0008	0008	0008	0008	0008	0007
DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0000	0008	0008	0000	0001	0000
EAN	0.030	0.526	0.057	2.325	0.370	0.019	0.164	0.431	3.50	0.183	0.000	0.000	0.176	0.461	0.492
S. D.	0.014	0.124	0.019	0.821	0.112	0.011	0.086	0.162	0.60	0.029	0.000	0.000	0.032	0.193	0.076
LOW	0.020	0.380	0.030	1.350	0.230	0.010	0.060	0.245	2.60	0.140	0.000	0.000	0.130	0.250	0.400
HIGH	0.040	0.690	0.080	3.600	0.500	0.040	0.310	0.680	4.69	0.230	0.000	0.000	0.230	0.810	0.630

SALMON, CHUM (KETA) ONCORHYNCHUS KETA 179017 AREA- ALASKA SITE- A5 MUSCLE

LENGTH NUM 10 MEAN 0.633 S. D. 0.047 LOW 0.516 HIGH 0.688
WEIGHT NUM 8 MEAN 4.423 S. D. 1.242 LOW 3.402 HIGH 7.031

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0006	0000	0002	0001	0000	0007	0000	0000	0000	0000	0006	0006	0000	0005	0000
MEAN	0.021	0.562	0.103	1.954	0.611	0.028	0.189	0.531	4.53	0.310	0.538	0.413	0.189	0.981	0.978
S. D.	0.006	0.285	0.035	1.062	0.231	0.008	0.092	0.092	0.72	0.160	0.435	0.274	0.061	0.445	0.439
LOW	0.015	0.190	0.040	0.060	0.240	0.020	0.065	0.375	3.31	0.100	0.060	0.120	0.110	0.545	0.525
HIGH	0.030	1.000	0.140	3.550	1.000	0.035	0.325	0.680	5.71	0.500	0.940	0.750	0.320	1.610	2.000

SALMON, CHUM (KETA) ONCORHYNCHUS KETA 179017 AREA- ALASKA SITE- A5 LIVER

LENGTH NUM 1 MEAN 0.633 S. D. 0.000 LOW 0.633 HIGH 0.633
WEIGHT NUM 1 MEAN 4.422 S. D. 0.000 LOW 4.422 HIGH 4.422

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.010	0.060	0.390	2.423	1.680	0.670	0.000	27.060	36.25	0.140	1.120	0.260	0.640	0.620	0.690
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.010	0.060	0.390	2.423	1.680	0.670	0.000	27.060	36.25	0.140	1.120	0.260	0.640	0.620	0.690

SALMON, CHUM (KETA) ONCORHYNCHUS KETA 179017 AREA- ALASKA SITE- D2 MUSCLE

LENGTH NUM 9 MEAN 0.582 S. D. 0.032 LOW 0.545 HIGH 0.640
WEIGHT NUM 9 MEAN 2.596 S. D. 0.455 LOW 2.041 HIGH 3.402

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0008	0008	0009	0009	0009	0008	0009	0009	0009	0009	0009	0009
N DET.	0004	0000	0002	0000	0000	0002	0000	0000	0000	0000	0007	0005	0000	0004	0000
MEAN	0.059	0.485	0.076	3.153	0.588	0.033	0.133	0.558	4.50	0.353	0.655	0.375	0.148	0.757	0.668
S. D.	0.042	0.316	0.034	1.907	0.137	0.008	0.034	0.233	0.56	0.342	0.658	0.267	0.049	0.562	0.228
LOW	0.020	0.100	0.040	1.000	0.410	0.020	0.090	0.150	3.63	0.040	0.190	0.120	0.080	0.250	0.425
HIGH	0.110	0.880	0.145	5.833	0.785	0.040	0.193	0.915	5.36	1.110	1.120	0.750	0.235	1.630	1.120

SALMON, CHUM (KETA) ONCORHYNCHUS KETA 179017 AREA- ALASKA SITE- D2 LIVER

LENGTH NUM 1 MEAN 0.578 S. D. 0.000 LOW 0.578 HIGH 0.578
WEIGHT NUM 1 MEAN 2.654 S. D. 0.000 LOW 2.654 HIGH 2.654

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.040	0.500	1.060	0.875	2.280	0.170	0.060	59.380	33.13	0.240	0.160	0.810	0.790	0.220	0.810
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.040	0.500	1.060	0.875	2.280	0.170	0.060	59.380	33.13	0.240	0.160	0.810	0.790	0.220	0.810

SALMON, CHUM (KETA) ONCORHYNCHUS KETA 179017 AREA- ALASKA SITE- G6 MUSCLE

LENGTH NUM 10 MEAN 0.615 S. D. 0.038 LOW 0.561 HIGH 0.685
WEIGHT NUM 10 MEAN 3.447 S. D. 0.779 LOW 2.495 HIGH 4.649

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0002	0000	0000	0000	0000	0001	0000	0000	0000	0001	0005	0004	0000	0002	0000
MEAN	0.039	0.503	0.082	2.015	0.447	0.040	0.109	0.630	4.92	0.213	0.256	0.337	0.173	0.644	0.569
S. D.	0.032	0.274	0.030	1.170	0.065	0.020	0.073	0.138	0.99	0.084	0.290	0.186	0.073	0.235	0.195
LOW	0.015	0.175	0.040	0.790	0.375	0.010	0.010	0.390	3.81	0.100	0.060	0.150	0.090	0.305	0.360
HIGH	0.110	1.060	0.145	4.700	0.580	0.070	0.220	0.800	6.96	0.360	0.750	0.620	0.355	0.880	0.880

SALMON, CHUM (KETA) ONCORHYNCHUS KETA 179017 AREA- ALASKA SITE- G6 LIVER

LENGTH NUM 1 MEAN 0.615 S. D. 0.000 LOW 0.615 HIGH 0.615
WEIGHT NUM 1 MEAN 3.447 S. D. 0.000 LOW 3.447 HIGH 3.447

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.190	0.690	5.500	0.720	0.020	0.310	17.500	20.00	0.210	0.310	0.000	0.840	0.660	0.880
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.190	0.690	5.500	0.720	0.020	0.310	17.500	20.00	0.210	0.310	0.000	0.840	0.660	0.880

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SALMON, CHUM (KETA)   ONCORHYNCHUS KETA   179017   AREA- ALASKA   SITE- I4   MUSCLE

LENGTH	NUM	10	MEAN	0.596	S. D.	0.019	LOW	0.570	HIGH	0.636
WEIGHT	NUM	10	MEAN	2.497	S. D.	0.576	LOW	1.702	HIGH	3.291

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0008	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	000
N DET.	0004	0000	0000	0000	0000	0000	0001	0000	0000	0000	0008	0009	0000	0000	000
MEAN	0.086	0.362	0.079	1.663	0.378	0.027	0.138	0.491	5.05	0.170	0.175	0.250	0.203	0.689	0.70
S. D.	0.040	0.129	0.039	1.332	0.120	0.012	0.042	0.172	0.70	0.047	0.064	0.000	0.065	0.143	0.103
LOW	0.035	0.230	0.040	0.275	0.260	0.010	0.060	0.130	3.97	0.120	0.130	0.000	0.115	0.440	0.530
HIGH	0.130	0.560	0.150	5.000	0.575	0.050	0.190	0.735	6.25	0.250	0.220	0.250	0.330	0.940	0.860

SALMON, CHUM (KETA)   ONCORHYNCHUS KETA   179017   AREA- ALASKA   SITE- I4   LIVER

LENGTH	NUM	1	MEAN	0.596	S. D.	0.000	LOW	0.596	HIGH	0.596
WEIGHT	NUM	1	MEAN	2.497	S. D.	0.000	LOW	2.497	HIGH	2.497

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000
MEAN	0.000	0.380	1.360	0.000	12.150	0.630	0.130	82.500	50.00	0.140	0.310	0.630	1.060	0.000	0.270
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.380	1.360	0.000	12.150	0.630	0.130	82.500	50.00	0.140	0.310	0.630	1.060	0.000	0.270

SALMON, CHUM (KETA)   ONCORHYNCHUS KETA   179017   AREA- ALASKA   SITE- U3   MUSCLE

LENGTH	NUM	10	MEAN	0.637	S. D.	0.040	LOW	0.582	HIGH	0.709
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0008	0008	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0004	0000	0001	0001	0000	0003	0001	0000	0000	0000	0006	0003	0000	0003	0000
MEAN	0.027	0.527	0.075	2.787	0.430	0.026	0.237	0.608	5.42	0.233	0.193	0.404	0.258	0.993	0.832
S. D.	0.022	0.318	0.033	1.331	0.131	0.011	0.121	0.135	1.75	0.123	0.108	0.232	0.086	0.424	0.189
LOW	0.010	0.156	0.030	1.408	0.220	0.010	0.070	0.475	3.62	0.110	0.060	0.020	0.145	0.375	0.550
HIGH	0.070	1.060	0.120	4.860	0.610	0.040	0.420	0.890	8.21	0.530	0.280	0.620	0.410	1.560	1.110

SALMON, CHUM (KETA)   ONCORHYNCHUS KETA   179017   AREA- ALASKA   SITE- U3   LIVER

LENGTH	NUM	1	MEAN	0.637	S. D.	0.000	LOW	0.637	HIGH	0.637
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.410	0.350	0.710	0.140	1.345	0.060	0.070	33.880	17.25	0.110	0.000	1.850	0.620	0.300	0.250
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.410	0.350	0.710	0.140	1.345	0.060	0.070	33.880	17.25	0.110	0.000	1.850	0.620	0.300	0.250

SALMON, COHO (SILVER)   ONCORHYNCHUS KISUTCH   179018   AREA- PACIFIC NORTHWEST   SITE- N1   MUSCLE

LENGTH	NUM	10	MEAN	0.719	S. D.	0.037	LOW	0.650	HIGH	0.800
WEIGHT	NUM	10	MEAN	4.173	S. D.	1.033	LOW	3.175	HIGH	6.350

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010
N DET.	0005	0000	0000	0000	0000	0001	0000	0000	0000	0000	0007	0008	0000	0000	0000
MEAN	0.028	0.481	0.069	2.269	0.248	0.031	0.211	0.564	3.99	0.173	0.103	0.050	0.104	0.729	0.572
S. D.	0.011	0.324	0.021	0.969	0.091	0.020	0.214	0.258	1.26	0.077	0.075	0.014	0.032	0.227	0.122
LOW	0.020	0.120	0.033	0.787	0.120	0.010	0.020	0.170	1.87	0.055	0.060	0.040	0.060	0.370	0.390
HIGH	0.040	1.120	0.110	3.925	0.415	0.070	0.690	0.965	6.56	0.320	0.190	0.060	0.170	1.050	0.735

SALMON, COHO (SILVER)   ONCORHYNCHUS KISUTCH   179018   AREA- PACIFIC NORTHWEST   SITE- N1   LIVER

LENGTH	NUM	1	MEAN	0.719	S. D.	0.000	LOW	0.719	HIGH	0.719
WEIGHT	NUM	1	MEAN	4.173	S. D.	0.000	LOW	4.173	HIGH	4.173

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.020	0.500	0.060	2.400	0.820	0.010	0.060	12.620	33.75	0.110	0.000	0.000	0.450	0.630	0.220
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.500	0.060	2.400	0.820	0.010	0.060	12.620	33.75	0.110	0.000	0.000	0.450	0.630	0.220

SALMON, COHO (SILVER)   ONCORHYNCHUS KISUTCH   179018   AREA- PACIFIC NORTHWEST   SITE- N7   MUSCLE

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	10	MEAN	4.278	S. D.	0.510	LOW	3.674	HIGH	5.352

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0009	0010	0010	0008
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0005	0006	0000	0001	0000
MEAN	0.056	0.339	0.059	1.399	0.802	0.029	0.133	0.570	3.05	0.171	0.201	0.233	0.096	0.748	0.509
S. D.	0.028	0.130	0.034	0.536	0.984	0.009	0.101	0.203	0.97	0.059	0.167	0.124	0.023	0.370	0.144
LOW	0.020	0.190	0.030	0.630	0.190	0.020	0.030	0.180	1.75	0.030	0.120	0.090	0.060	0.095	0.190
HIGH	0.110	0.560	0.150	2.250	3.275	0.045	0.340	0.845	4.94	0.230	0.500	0.310	0.130	1.435	0.625

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                                          TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                              REPORT   MF17
                                         IN RESOURCE SURVEY SPECIES;
  LOCATION LEVEL 5                       BY TISSUE AND LOCATION

  SALMON, COHO (SILVER)            ONCORHYNCHUS KISUTCH            179018   AREA- PACIFIC NORTHWEST   SITE- N7   LIVER

 LENGTH      NUM    0   MEAN        0.000   S. D.       0.000   LOW       0.000   HIGH          0.000
 WEIGHT      NUM    1   MEAN        3.819   S. D.       0.000   LOW       3.819   HIGH          3.819
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0001    0001    0001    0001    0001    0001    0001     0001   0001     0001     0001    0001    0001    0001     0001
 N DET.      0001    0000    0000    0000    0000    0001    0000     0000   0000     0000     0001    0001    0000    0000     0000
 MEAN       0.000   0.250   0.110   2.300   1.265   0.000   0.090    1.640  14.81    0.120    0.000   0.000   0.390   0.530    0.060
 S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000   0.00    0.000    0.000   0.000   0.000   0.000    0.000
 LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000   0.00    0.000    0.000   0.000   0.000   0.000    0.000
 HIGH       0.000   0.250   0.110   2.300   1.265   0.000   0.090    1.640  14.81    0.120    0.000   0.000   0.390   0.530    0.060

  SALMON, COHO (SILVER)            ONCORHYNCHUS KISUTCH            179018   AREA- PACIFIC NORTHWEST   SITE- N8   MUSCLE

 LENGTH      NUM    0   MEAN        0.000   S. D.       0.000   LOW       0.000   HIGH          0.000
 WEIGHT      NUM   20   MEAN        3.969   S. D.       1.047   LOW       2.223   HIGH          5.851
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0020    0020    0020    0020    0020    0020    0018     0020   0020     0020     0020    0020    0020    0020     0019
 N DET.      0002    0000    0001    0001    0000    0004    0001     0000   0000     0000     0008    0009    0000    0003     0000
 MEAN       0.056   0.527   0.059   1.706   0.422   0.030   0.154    0.377   3.30    0.168    0.188   0.380   0.123   0.684    0.611
 S. D.      0.056   0.323   0.020   0.698   0.376   0.011   0.089    0.152   0.87    0.078    0.131   0.320   0.052   0.269    0.205
 LOW        0.020   0.150   0.010   0.375   0.010   0.006   0.030    0.150   1.30    0.020    0.030   0.060   0.040   0.100    0.365
 HIGH       0.210   1.250   0.095   2.950   1.510   0.050   0.310    0.630   4.75    0.280    0.410   1.120   0.260   1.060    1.050

  SALMON, COHO (SILVER)            ONCORHYNCHUS KISUTCH            179018   AREA- PACIFIC NORTHWEST   SITE- N8   LIVER

 LENGTH      NUM    0   MEAN        0.000   S. D.       0.000   LOW       0.000   HIGH          0.000
 WEIGHT      NUM    2   MEAN        4.198   S. D.       0.028   LOW       4.178   HIGH          4.218
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0002    0002    0002    0002    0002    0002    0002     0002   0002     0002     0002    0002    0002    0002     0002
 N DET.      0001    0000    0000    0000    0000    0000    0000     0000   0000     0000     0001    0001    0000    0000     0000
 MEAN       0.110   0.435   0.300   1.544   1.150   0.045   0.158    2.668  21.70    0.168    0.250   0.190   0.908   0.530    0.410
 S. D.      0.000   0.177   0.000   1.264   0.170   0.035   0.046    1.128  10.41    0.004    0.000   0.000   0.223   0.311    0.127
 LOW        0.000   0.310   0.300   0.650   1.030   0.020   0.125    1.870  14.34    0.165    0.000   0.000   0.750   0.310    0.320
 HIGH       0.110   0.560   0.300   2.437   1.270   0.070   0.190    3.465  29.06    0.170    0.250   0.190   1.065   0.750    0.500

  SALMON, COHO (SILVER)            ONCORHYNCHUS KISUTCH            179018   AREA- ALASKA                  SITE- H4   MUSCLE

 LENGTH      NUM   10   MEAN        0.670   S. D.       0.135   LOW       0.310   HIGH          0.780
 WEIGHT      NUM    9   MEAN        4.944   S. D.       2.171   LOW       0.908   HIGH          7.264
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0010    0009    0010    0010    0010    0010    0010     0010   0010     0010     0010    0010    0010    0010     0010
 N DET.      0007    0000    0000    0000    0001    0002    0001     0000   0000     0000     0010    0009    0000    0000     0000
 MEAN       0.110   0.444   0.086   2.876   0.325   0.024   0.293    0.493   4.18    0.184    0.000   0.280   0.148   0.673    0.645
 S. D.      0.072   0.196   0.032   1.374   0.111   0.010   0.215    0.160   0.66    0.066    0.000   0.000   0.044   0.189    0.199
 LOW        0.030   0.190   0.050   1.300   0.120   0.010   0.060    0.180   2.94    0.110    0.000   0.000   0.090   0.440    0.410
 HIGH       0.170   0.690   0.160   6.150   0.500   0.040   0.750    0.730   4.94    0.290    0.000   0.280   0.240   1.000    1.000

  SALMON, COHO (SILVER)            ONCORHYNCHUS KISUTCH            179018   AREA- ALASKA                  SITE- H4   LIVER

 LENGTH      NUM    1   MEAN        0.670   S. D.       0.000   LOW       0.670   HIGH          0.670
 WEIGHT      NUM    1   MEAN        5.130   S. D.       0.000   LOW       5.130   HIGH          5.130
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0001    0001    0001    0001    0001    0001    0001     0001   0001     0001     0001    0001    0001    0001     0001
 N DET.      0000    0000    0000    0000    0000    0000    0000     0000   0000     0000     0001    0001    0000    0000     0000
 MEAN       0.120   0.370   0.610   1.400   1.190   0.160   0.690   11.650  19.07    0.240    0.000   0.000   0.590   0.660    0.280
 S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000   0.00    0.000    0.000   0.000   0.000   0.000    0.000
 LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000   0.00    0.000    0.000   0.000   0.000   0.000    0.000
 HIGH       0.120   0.370   0.610   1.400   1.190   0.160   0.690   11.650  19.07    0.240    0.000   0.000   0.590   0.660    0.280

  SALMON, COHO (SILVER)            ONCORHYNCHUS KISUTCH            179018   AREA- ALASKA                  SITE- O4   MUSCLE

 LENGTH      NUM    9   MEAN        0.642   S. D.       0.034   LOW       0.590   HIGH          0.680
 WEIGHT      NUM    9   MEAN        4.196   S. D.       0.987   LOW       2.948   HIGH          5.557
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0009    0009    0009    0009    0009    0009    0009     0009   0009     0009     0009    0009    0009    0009     0009
 N DET.      0002    0002    0003    0000    0000    0004    0001     0000   0000     0003     0007    0007    0000    0006     0000
 MEAN       0.052   0.337   0.047   2.436   0.459   0.028   0.274    0.538   4.87    0.284    0.194   0.665   0.121   0.838    0.565
 S. D.      0.061   0.282   0.023   0.903   0.155   0.013   0.165    0.202   1.19    0.165    0.221   0.049   0.057   0.280    0.180
 LOW        0.010   0.050   0.030   1.800   0.225   0.010   0.110    0.280   3.22    0.110    0.037   0.630   0.030   0.515    0.415
 HIGH       0.185   0.850   0.090   4.725   0.710   0.040   0.550    0.960   6.66    0.500    0.350   0.700   0.210   1.000    1.000

  SALMON, COHO (SILVER)            ONCORHYNCHUS KISUTCH            179018   AREA- ALASKA                  SITE- O4   LIVER

 LENGTH      NUM    1   MEAN        0.642   S. D.       0.000   LOW       0.642   HIGH          0.642
 WEIGHT      NUM    1   MEAN        4.196   S. D.       0.000   LOW       4.196   HIGH          4.196
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

 NUMBER      0001    0001    0001    0001    0001    0001    0001     0001   0001     0001     0001    0001    0001    0001     0001
 N DET.      0000    0000    0000    0001    0000    0000    0000     0000   0000     0000     0000    0000    0000    0000     0000
 MEAN       0.020   0.500   1.220   0.000   1.300   0.010   0.070    6.870  33.69    0.050    0.280   0.440   1.210   0.940    0.720
 S. D.      0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000   0.00    0.000    0.000   0.000   0.000   0.000    0.000
 LOW        0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.000   0.00    0.000    0.000   0.000   0.000   0.000    0.000
 HIGH       0.020   0.500   1.220   0.000   1.300   0.010   0.070    6.870  33.69    0.050    0.280   0.440   1.210   0.940    0.720
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

SALMON, COHO (SILVER)   ONCORHYNCHUS KISUTCH   179018   AREA- ALASKA   SITE- U1   MUSCLE

LENGTH NUM 10 MEAN 0.557 S. D. 0.065 LOW 0.447 HIGH 0.622
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0009	0010	0010	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0004	0000	0000	0001	0001	0002	0000	0000	0000	0000	0004	0005	0000	0002	0000
MEAN	0.025	0.463	0.097	1.899	0.391	0.034	0.196	0.666	6.11	0.186	0.356	0.338	0.186	0.821	0.527
S. D.	0.015	0.263	0.032	1.166	0.192	0.013	0.169	0.269	1.83	0.075	0.456	0.296	0.095	0.280	0.236
LOW	0.010	0.233	0.050	0.355	0.070	0.010	0.060	0.410	3.57	0.040	0.060	0.160	0.090	0.450	0.380
HIGH	0.050	1.000	0.150	3.950	0.675	0.050	0.610	1.230	10.00	0.285	1.120	0.780	0.375	1.250	1.190

SALMON, COHO (SILVER)   ONCORHYNCHUS KISUTCH   179018   AREA- ALASKA   SITE- U1   LIVER

LENGTH NUM 1 MEAN 0.557 S. D. 0.000 LOW 0.557 HIGH 0.557
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.000	0.380	0.900	0.387	0.600	0.030	0.500	33.130	25.63	0.250	0.250	0.250	0.560	0.590	0.940
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.380	0.900	0.387	0.600	0.030	0.500	33.130	25.63	0.250	0.250	0.250	0.560	0.590	0.940

SALMON, SOCKEYE (RED)   ONCORHYNCHUS NERKA   179019   AREA- PACIFIC NORTHWEST   SITE- M6   MUSCLE

LENGTH NUM 11 MEAN 0.469 S. D. 0.044 LOW 0.388 HIGH 0.533
WEIGHT NUM 6 MEAN 1.175 S. D. 0.330 LOW 0.741 HIGH 1.450

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0011	0012	0012	0012	0012	0012	0011	0012	0012	0012	0012	0012	0012	0012
N DET.	0007	0000	0001	0000	0000	0004	0000	0000	0000	0001	0008	0007	0000	0005	0000
MEAN	0.068	0.412	0.090	2.160	0.365	0.039	0.187	0.480	4.15	0.254	0.115	0.228	0.113	0.877	0.534
S. D.	0.083	0.281	0.067	1.193	0.182	0.024	0.182	0.197	0.85	0.223	0.039	0.149	0.047	0.235	0.172
LOW	0.010	0.050	0.030	0.150	0.180	0.020	0.050	0.140	2.94	0.060	0.060	0.080	0.060	0.635	0.300
HIGH	0.210	0.880	0.240	4.875	0.760	0.080	0.650	0.800	6.07	0.770	0.150	0.440	0.210	1.250	0.900

SALMON, SOCKEYE (RED)   ONCORHYNCHUS NERKA   179019   AREA- PACIFIC NORTHWEST   SITE- M6   LIVER

LENGTH NUM 1 MEAN 0.462 S. D. 0.000 LOW 0.462 HIGH 0.462
WEIGHT NUM 1 MEAN 1.113 S. D. 0.000 LOW 1.113 HIGH 1.113

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.040	0.130	0.780	0.615	6.290	0.080	0.310	190.630	20.63	0.160	0.310	0.250	0.580	0.310	0.690
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.040	0.130	0.780	0.615	6.290	0.080	0.310	190.630	20.63	0.160	0.310	0.250	0.580	0.310	0.690

SALMON, SOCKEYE (RED)   ONCORHYNCHUS NERKA   179019   AREA- ALASKA   SITE- H7   MUSCLE

LENGTH NUM 10 MEAN 0.657 S. D. 0.036 LOW 0.580 HIGH 0.700
WEIGHT NUM 10 MEAN 3.405 S. D. 0.485 LOW 2.497 HIGH 4.200

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0008	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010
N DET.	0009	0000	0000	0000	0000	0001	0001	0000	0000	0000	0006	0007	0000	0001	0000
MEAN	0.020	0.382	0.060	1.547	0.429	0.027	0.118	0.399	4.20	0.162	0.275	0.427	0.104	0.682	0.529
S. D.	0.000	0.188	0.031	0.908	0.064	0.010	0.074	0.222	0.73	0.060	0.241	0.177	0.025	0.199	0.185
LOW	0.000	0.190	0.020	0.525	0.330	0.010	0.060	0.110	3.44	0.080	0.090	0.310	0.075	0.500	0.370
HIGH	0.020	0.870	0.130	3.275	0.500	0.040	0.285	0.785	5.62	0.250	0.630	0.630	0.150	1.060	1.000

SALMON, SOCKEYE (RED)   ONCORHYNCHUS NERKA   179019   AREA- ALASKA   SITE- H7   LIVER

LENGTH NUM 1 MEAN 0.657 S. D. 0.000 LOW 0.657 HIGH 0.657
WEIGHT NUM 1 MEAN 3.405 S. D. 0.000 LOW 3.405 HIGH 3.405

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.060	0.160	4.950	1.990	0.040	0.060	35.000	9.13	0.120	0.130	0.000	0.690	0.310	0.410
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.060	0.160	4.950	1.990	0.040	0.060	35.000	9.13	0.120	0.130	0.000	0.690	0.310	0.410

SALMON, SOCKEYE (RED)   ONCORHYNCHUS NERKA   179019   AREA- ALASKA   SITE- J6   MUSCLE

LENGTH NUM 10 MEAN 0.634 S. D. 0.036 LOW 0.600 HIGH 0.705
WEIGHT NUM 10 MEAN 3.295 S. D. 0.483 LOW 2.800 HIGH 4.100

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0004	0001	0001	0000	0000	0005	0002	0000	0000	0002	0008	0007	0000	0003	0000
MEAN	0.033	0.387	0.107	1.938	0.498	0.037	0.182	0.752	6.16	0.311	0.530	0.217	0.133	0.841	0.730
S. D.	0.021	0.170	0.079	1.409	0.179	0.010	0.084	0.322	2.33	0.192	0.481	0.095	0.050	0.337	0.314
LOW	0.010	0.150	0.040	0.405	0.170	0.030	0.060	0.240	3.31	0.105	0.190	0.120	0.070	0.440	0.250
HIGH	0.070	0.710	0.290	5.290	0.840	0.050	0.285	1.265	11.43	0.605	0.870	0.310	0.230	1.410	1.330

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                                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                              REPORT    MF17
                                                        IN RESOURCE SURVEY SPECIES;
 LOCATION LEVEL 5                                       BY TISSUE AND LOCATION


  LMON, SOCKEYE (RED)            ONCORHYNCHUS NERKA                      179019    AREA- ALASKA                 SITE- J6    LIVER

  GTH       NUM    1    MEAN          0.634    S. D.       0.000    LOW        0.634    HIGH          0.634
 EIGHT      NUM    1    MEAN          3.295    S. D.       0.000    LOW        3.295    HIGH          3.295
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER    CHROM     COPPER   ZINC     NICKEL      MOLYB VANADIUM   MANG   ANTIMONY     TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM       PPM     PPM       PPM         PPM     PPM      PPM      PPM        PPM

  IBER      0001     0001     0001    0001     0001     0001     0001      0001    0001      0001        0001    0001     0001     0001       0001
  DET.      0000     0000     0000    0000     0000     0000     0000      0000    0000      0000        0000    0000     0000     0000       0000
  N        0.050    0.060    0.760   1.010    8.075    0.710    0.140    65.000   28.50     0.180       0.440   0.620    0.800    1.000      0.720
 S. D.     0.000    0.000    0.000   0.000    0.000    0.000    0.000     0.000    0.00     0.000       0.000   0.000    0.000    0.000      0.000
 LOW       0.000    0.000    0.000   0.000    0.000    0.000    0.000     0.000    0.00     0.000       0.000   0.000    0.000    0.000      0.000
 HIGH      0.050    0.060    0.760   1.010    8.075    0.710    0.140    65.000   28.50     0.180       0.440   0.620    0.800    1.000      0.720


  ALMON, SOCKEYE (RED)           ONCORHYNCHUS NERKA                      179019    AREA- ALASKA                 SITE- 04    MUSCLE

 LENGTH     NUM   20    MEAN          0.590    S. D.       0.025    LOW        0.561    HIGH          0.639
 WEIGHT     NUM   20    MEAN          2.530    S. D.       0.361    LOW        2.100    HIGH          3.300
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER    CHROM     COPPER   ZINC     NICKEL      MOLYB VANADIUM   MANG   ANTIMONY     TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM       PPM     PPM       PPM         PPM     PPM      PPM      PPM        PPM

  IMBER     0019     0019     0019    0020     0020     0020     0018      0020    0020      0020        0020    0019     0020     0020       0019
  DET.      0009     0000     0002    0002     0000     0008     0001      0000    0000      0001        0011    0011     0000     0004       0000
 MEAN      0.041    0.432    0.073   2.534    0.395    0.028    0.275     0.470    6.21     0.185       0.463   0.320    0.129    0.866      0.671
 S. D.     0.028    0.269    0.032   1.443    0.137    0.015    0.179     0.147    1.60     0.107       0.296   0.176    0.064    0.339      0.243
  OW       0.010    0.063    0.035   0.626    0.240    0.010    0.040     0.190    3.21     0.030       0.045   0.130    0.050    0.310      0.350
  IGH      0.100    1.060    0.140   6.750    0.755    0.050    0.690     0.750    9.12     0.500       0.870   0.690    0.285    1.630      1.250


  SALMON, SOCKEYE (RED)          ONCORHYNCHUS NERKA                      179019    AREA- ALASKA                 SITE- U1    MUSCLE

 LENGTH     NUM   10    MEAN          0.516    S. D.       0.037    LOW        0.459    HIGH          0.583
  EIGHT     NUM   10    MEAN          2.009    S. D.       0.343    LOW        1.362    HIGH          2.497
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER    CHROM     COPPER   ZINC     NICKEL      MOLYB VANADIUM   MANG   ANTIMONY     TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM       PPM     PPM       PPM         PPM     PPM      PPM      PPM        PPM

 NUMBER     0009     0009     0010    0008     0008     0010     0010      0010    0009      0010        0010    0010     0010     0010       0009
 N DET.     0004     0000     0000    0001     0000     0002     0001      0000    0000      0000        0008    0005     0000     0002       0000
 MEAN      0.028    0.433    0.095   2.169    0.478    0.030    0.131     0.540    5.74     0.215       0.310   0.584    0.141    1.105      0.634
  . D.     0.016    0.224    0.031   1.405    0.105    0.011    0.063     0.161    1.30     0.073       0.042   0.366    0.062    0.510      0.326
  OW       0.010    0.020    0.050   0.405    0.330    0.020    0.040     0.260    4.42     0.120       0.280   0.220    0.040    0.600      0.050
  IGH      0.050    0.690    0.160   4.300    0.620    0.050    0.202     0.860    8.09     0.320       0.340   1.130    0.250    2.310      1.205


  SALMON, SOCKEYE (RED)          ONCORHYNCHUS NERKA                      179019    AREA- ALASKA                 SITE- U1    LIVER

  ENGTH     NUM    1    MEAN          0.516    S. D.       0.000    LOW        0.516    HIGH          0.516
  EIGHT     NUM    1    MEAN          2.009    S. D.       0.000    LOW        2.009    HIGH          2.009
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER    CHROM     COPPER   ZINC     NICKEL      MOLYB VANADIUM   MANG   ANTIMONY     TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM       PPM     PPM       PPM         PPM     PPM      PPM      PPM        PPM

 NUMBER     0001     0001     0001    0001     0001     0001     0001      0001    0001      0001        0001    0001     0001     0001       0001
   DET.     0001     0000     0000    0000     0000     0000     0000      0000    0000      0000        0000    0001     0000     0000       0000
  EAN      0.000    0.310    0.880   1.050    9.000    0.130    0.060   146.880   23.75     0.260       0.160   0.000    0.570    0.630      0.810
  . D.     0.000    0.000    0.000   0.000    0.000    0.000    0.000     0.000    0.00     0.000       0.000   0.000    0.000    0.000      0.000
  OW       0.000    0.000    0.000   0.000    0.000    0.000    0.000     0.000    0.00     0.000       0.000   0.000    0.000    0.000      0.000
 HIGH      0.000    0.310    0.880   1.050    9.000    0.130    0.060   146.880   23.75     0.260       0.160   0.000    0.570    0.630      0.810


  SALMON, CHINOOK (KING)         ONCORHYNCHUS TSHAWYTSCHS                179020    AREA- CALIFORNIA             SITE- F4    MUSCLF

  ENGTH     NUM    6    MEAN          0.467    S. D.       0.101    LOW        0.290    HIGH          0.580
  EIGHT     NUM    6    MEAN          1.533    S. D.       0.654    LOW        0.750    HIGH          2.400
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER    CHROM     COPPER   ZINC     NICKEL      MOLYB VANADIUM   MANG   ANTIMONY     TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM       PPM     PPM       PPM         PPM     PPM      PPM      PPM        PPM

  UMBER     0006     0006     0006    0006     0006     0006     0006      0006    0006      0006        0006    0006     0006     0006       0006
  DET.      0001     0000     0000    0000     0001     0000     0001      0000    0000      0000        0005    0003     0000     0000       0000
  EAN      0.058    0.508    0.066   1.994    0.552    0.034    0.304     0.298    4.37     0.153       0.370   0.217    0.103    0.621      0.521
 S. D.     0.018    0.126    0.017   0.507    0.152    0.012    0.305     0.118    1.10     0.061       0.000   0.143    0.046    0.256      0.154
 LOW       0.040    0.310    0.035   1.491    0.370    0.020    0.075     0.180    3.15     0.090       0.000   0.060    0.070    0.280      0.270
 HIGH      0.080    0.655    0.085   2.650    0.775    0.050    0.810     0.515    6.03     0.265       0.370   0.340    0.195    1.000      0.670


  SALMON, CHINOOK (KING)         ONCORHYNCHUS TSHAWYTSCHS                179020    AREA- CALIFORNIA             SITE- F4    LIVER

 LENGTH     NUM    1    MEAN          0.458    S. D.       0.000    LOW        0.458    HIGH          0.458
 WEIGHT     NUM    1    MEAN          1.338    S. D.       0.000    LOW        1.338    HIGH          1.338
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER    CHROM     COPPER   ZINC     NICKEL      MOLYB VANADIUM   MANG   ANTIMONY     TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM       PPM     PPM       PPM         PPM     PPM      PPM      PPM        PPM

 NUMBER     0001     0001     0001    0000     0001     0001     0001      0001    0001      0001        0001    0001     0001     0001       0001
 N DET.     0000     0000     0000    0000     0000     0001     0000      0000    0000      0000        0000    0000     0000     0000       0000
 MEAN      0.020    1.130    0.280   0.000    1.600    0.000    0.130    26.250   32.50     0.150       0.060   0.310    0.380    0.750      0.560
 S. D.     0.000    0.000    0.000   0.000    0.000    0.000    0.000     0.000    0.00     0.000       0.000   0.000    0.000    0.000      0.000
 LOW       0.000    0.000    0.000   0.000    0.000    0.000    0.000     0.000    0.00     0.000       0.000   0.000    0.000    0.000      0.000
 HIGH      0.020    1.130    0.280   0.000    1.600    0.000    0.130    26.250   32.50     0.150       0.060   0.310    0.380    0.750      0.560


  SALMON, CHINOOK (KING)         ONCORHYNCHUS TSHAWYTSCHS                179020    AREA- PACIFIC NORTHWEST   SITE- N1    MUSCLE

 LENGTH     NUM    3    MEAN          0.850    S. D.       0.078    LOW        0.770    HIGH          0.925
 WEIGHT     NUM    3    MEAN          6.804    S. D.       1.635    LOW        4.990    HIGH          8.165
          MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER    CHROM     COPPER   ZINC     NICKEL      MOLYB VANADIUM   MANG   ANTIMONY     TIN
            PPM      PPM      PPM     PPM      PPM      PPM      PPM       PPM     PPM       PPM         PPM     PPM      PPM      PPM        PPM

 NUMBER     0003     0003     0003    0003     0003     0003     0003      0003    0003      0003        0003    0003     0003     0003       0003
 N DET.     0000     0000     0000    0000     0000     0001     0000      0000    0000      0000        0002    0001     0000     0000       0000
 MEAN      0.085    0.573    0.080   2.133    0.571    0.020    0.065     0.573    5.05     0.197       0.350   0.160    0.105    0.613      0.475
 S. D.     0.087    0.370    0.061   1.165    0.359    0.014    0.028     0.150    1.88     0.122       0.000   0.057    0.051    0.119      0.140
 LOW       0.010    0.353    0.035   0.850    0.235    0.010    0.040     0.400    2.94     0.105       0.000   0.120    0.060    0.530      0.340
 HIGH      0.180    1.000    0.150   3.125    0.950    0.030    0.095     0.660    6.53     0.335       0.350   0.200    0.160    0.750      0.620
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

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 SALMON, CHINOOK (KING)          ONCORHYNCHUS TSHAWYTSCHS           179020   AREA- PACIFIC NORTHWEST   SITE- N1   LIVER

LENGTH     NUM    1   MEAN          0.850   S. D.       0.000   LOW      0.850   HIGH        0.850
WEIGHT     NUM    1   MEAN          6.804   S. D.       0.000   LOW      6.804   HIGH        6.804
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM     PPM

NUMBER     0001     0001   0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    000
N DET.     0000     0000   0000    0000    0000    0000    0000    0000    0000    0000    0000    0001    0000    0000    000
MEAN       0.180    0.405  0.175   1.791   1.820   0.165   0.180  31.185   60.62   0.160   0.425   0.000   0.795   0.535   0.685
S. D.      0.000    0.000  0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW        0.000    0.000  0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH       0.180    0.405  0.175   1.791   1.820   0.165   0.180  31.185   60.62   0.160   0.425   0.000   0.795   0.535   0.68

 SALMON, CHINOOK (KING)          ONCORHYNCHUS TSHAWYTSCHS           179020   AREA- PACIFIC NORTHWEST   SITE- N7   MUSCLE

LENGTH     NUM    0   MEAN          0.000   S. D.       0.000   LOW      0.000   HIGH        0.000
WEIGHT     NUM   10   MEAN          5.693   S. D.       0.741   LOW      4.858   HIGH        7.128
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM     PPM

NUMBER     0009     0010   0009    0010    0009    0010    0010    0010    0010    0009    0010    0010    0010    0010    0009
N DET.     0000     0000   0000    0000    0000    0003    0000    0000    0000    0000    0005    0008    0000    0001    0000
MEAN       0.039    0.460  0.049   2.785   0.308   0.031   0.230   0.473    4.88   0.205   0.252   0.375   0.095   0.714   0.434
S. D.      0.015    0.277  0.014   1.476   0.088   0.011   0.232   0.201    1.37   0.057   0.348   0.007   0.034   0.483   0.109
LOW        0.020    0.210  0.030   1.300   0.210   0.020   0.045   0.250    3.25   0.115   0.060   0.370   0.040   0.130   0.310
HIGH       0.060    0.940  0.070   6.600   0.440   0.050   0.690   0.950    7.91   0.300   0.870   0.380   0.140   1.810   0.630

 SALMON, CHINOOK (KING)          ONCORHYNCHUS TSHAWYTSCHS           179020   AREA- PACIFIC NORTHWEST   SITE- N7   LIVER

LENGTH     NUM    0   MEAN          0.000   S. D.       0.000   LOW      0.000   HIGH        0.000
WEIGHT     NUM    1   MEAN          5.693   S. D.       0.000   LOW      5.693   HIGH        5.693
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM     PPM

NUMBER     0001     0001   0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001    0001
N DET.     0000     0000   0000    0000    0000    0000    0000    0000    0000    0000    0001    0000    0000    0000    0000
MEAN       0.020    0.630  0.200   7.500   0.360   0.010   0.060  66.250   42.50   0.050   0.000   0.310   0.510   0.130   0.220
S. D.      0.000    0.000  0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
LOW        0.000    0.000  0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000   0.000   0.000   0.000   0.000   0.000
HIGH       0.020    0.630  0.200   7.500   0.360   0.010   0.060  66.250   42.50   0.050   0.000   0.310   0.510   0.130   0.220

 SALMON, CHINOOK (KING)          ONCORHYNCHUS TSHAWYTSCHS           179020   AREA- PACIFIC NORTHWEST   SITE- N8   MUSCLE

LENGTH     NUM    0   MEAN          0.000   S. D.       0.000   LOW      0.000   HIGH        0.000
WEIGHT     NUM   30   MEAN          9.184   S. D.       2.430   LOW      6.668   HIGH       19.097
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM     PPM

NUMBER     0050     0050   0050    0046    0046    0050    0049    0050    0050    0048    0050    0050    0049    0049    0047
N DET.     0004     0000   0001    0000    0000    0006    0001    0000    0000    0000    0029    0030    0001    0007    0000
MEAN       0.083    0.476  0.068   2.381   0.463   0.029   0.142   0.510    4.44   0.206   0.350   0.452   0.107   0.677   0.559
S. D.      0.041    0.298  0.033   1.251   0.398   0.018   0.106   0.250    1.65   0.111   0.227   0.825   0.060   0.283   0.275
LOW        0.020    0.095  0.010   0.350   0.080   0.010   0.030   0.060    1.38   0.070   0.060   0.060   0.010   0.130   0.190
HIGH       0.180    1.500  0.180   6.600   2.590   0.105   0.555   1.130    8.93   0.545   0.720   3.790   0.260   1.190   1.500

 SALMON, CHINOOK (KING)          ONCORHYNCHUS TSHAWYTSCHS           179020   AREA- PACIFIC NORTHWEST   SITE- N8   LIVER

LENGTH     NUM    0   MEAN          0.000   S. D.       0.000   LOW      0.000   HIGH        0.000
WEIGHT     NUM    3   MEAN          9.887   S. D.       2.432   LOW      8.265   HIGH       12.683
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM     PPM

NUMBER     0005     0004   0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0005    0003
N DET.     0001     0001   0000    0000    0000    0000    0000    0000    0000    0000    0002    0004    0000    0000    0001
MEAN       0.149    0.391  0.558   2.777   1.328   0.024   0.141  16.039   36.74   0.141   0.240   0.310   0.454   0.603   0.418
S. D.      0.121    0.202  0.536   3.340   0.234   0.015   0.121  15.535   26.91   0.076   0.147   0.000   0.187   0.289   0.054
LOW        0.076    0.250  0.090   0.850   0.935   0.010   0.020   4.310   10.80   0.050   0.150   0.000   0.210   0.300   0.380
HIGH       0.330    0.623  1.250   8.700   1.510   0.050   0.296  42.500   74.58   0.226   0.410   0.310   0.710   1.000   0.456

 SALMON, CHINOOK (KING)          ONCORHYNCHUS TSHAWYTSCHS           179020   AREA- PACIFIC NORTHWEST   SITE- P7   MUSCLE

LENGTH     NUM    6   MEAN          0.585   S. D.       0.079   LOW      0.505   HIGH        0.680
WEIGHT     NUM    6   MEAN          2.195   S. D.       0.436   LOW      1.780   HIGH        2.770
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM     PPM

NUMBER     0006     0006   0006    0005    0005    0006    0006    0006    0006    0006    0006    0006    0006    0006    0006
N DET.     0000     0000   0002    0000    0000    0001    0000    0000    0000    0000    0004    0004    0000    0002    0000
MEAN       0.049    0.452  0.068   2.279   0.384   0.043   0.476   0.720    4.35   0.313   0.100   0.595   0.089   0.655   0.509
S. D.      0.019    0.257  0.023   1.075   0.217   0.016   0.229   0.200    1.01   0.228   0.028   0.219   0.036   0.117   0.184
LOW        0.030    0.170  0.036   1.000   0.195   0.025   0.176   0.525    3.22   0.070   0.080   0.440   0.040   0.500   0.350
HIGH       0.075    0.890  0.090   3.600   0.750   0.070   0.880   1.030    6.07   0.670   0.120   0.750   0.140   0.763   0.800

 SALMON, CHINOOK (KING)          ONCORHYNCHUS TSHAWYTSCHS           179020   AREA- ALASKA                SITE- D2   MUSCLE

LENGTH     NUM   10   MEAN          0.821   S. D.       0.072   LOW      0.730   HIGH        0.954
WEIGHT     NUM   10   MEAN          6.509   S. D.       1.929   LOW      4.536   HIGH       10.206
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM   COPPER  ZINC   NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM     PPM     PPM    PPM     PPM      PPM    PPM     PPM     PPM     PPM

NUMBER     0009     0010   0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010    0010
N DET.     0003     0002   0002    0000    0000    0003    0000    0000    0000    0002    0006    0007    0000    0004    0000
MEAN       0.042    0.343  0.099   2.868   0.462   0.049   0.148   0.454    4.44   0.213   0.205   0.250   0.134   0.656   0.552
S. D.      0.021    0.172  0.067   1.244   0.134   0.027   0.120   0.096    1.21   0.131   0.171   0.052   0.058   0.245   0.229
LOW        0.010    0.100  0.040   0.750   0.290   0.030   0.040   0.250    2.62   0.110   0.060   0.190   0.055   0.380   0.250
HIGH       0.070    0.650  0.250   4.300   0.690   0.110   0.395   0.570    6.14   0.460   0.440   0.280   0.250   1.070   0.940
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

SALMON, CHINOOK (KING) ONCORHYNCHUS TSHAWYTSCHS 179020 AREA- ALASKA SITE- D2 LIVER

LENGTH NUM 1 MEAN 0.821 S. D. 0.000 LOW 0.821 HIGH 0.821
WEIGHT NUM 1 MEAN 6.509 S. D. 0.000 LOW 6.509 HIGH 6.509

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	0.020	0.890	2.710	0.180	1.540	0.250	1.055	20.000	45.71	0.460	0.300	0.000	1.500	0.000	0.350
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.890	2.710	0.180	1.540	0.250	1.055	20.000	45.71	0.460	0.300	0.000	1.500	0.000	0.350

SALMON, CHINOOK (KING) ONCORHYNCHUS TSHAWYTSCHS 179020 AREA- ALASKA SITE- H7 MUSCLE

LENGTH NUM 10 MEAN 0.827 S. D. 0.105 LOW 0.660 HIGH 0.950
WEIGHT NUM 10 MEAN 7.503 S. D. 2.411 LOW 4.086 HIGH 10.783

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0008	0000	0000	0000	0000	0001	0001	0001	0000	0000	0007	0007	0000	0000	0000
MEAN	0.038	0.533	0.060	1.576	0.445	0.024	0.198	0.252	3.82	0.146	0.147	0.753	0.105	0.625	0.474
S. D.	0.025	0.312	0.027	0.302	0.206	0.012	0.155	0.127	0.72	0.028	0.051	0.214	0.050	0.225	0.181
LOW	0.020	0.190	0.030	1.230	0.080	0.010	0.060	0.060	2.69	0.090	0.090	0.630	0.035	0.345	0.160
HIGH	0.055	1.310	0.125	2.155	0.720	0.050	0.500	0.440	5.00	0.180	0.190	1.000	0.190	0.940	0.750

SALMON, CHINOOK (KING) ONCORHYNCHUS TSHAWYTSCHS 179020 AREA- ALASKA SITE- H7 LIVER

LENGTH NUM 2 MEAN 0.847 S. D. 0.047 LOW 0.814 HIGH 0.880
WEIGHT NUM 2 MEAN 8.031 S. D. 1.244 LOW 7.151 HIGH 8.910

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.035	0.755	0.645	0.863	2.070	0.030	0.095	3.595	56.88	0.080	0.250	0.630	0.530	0.565	0.345
S. D.	0.021	0.530	0.516	1.008	1.131	0.000	0.049	0.403	56.58	0.071	0.000	0.000	0.396	0.262	0.403
LOW	0.020	0.380	0.280	0.150	1.270	0.000	0.060	3.310	16.87	0.030	0.000	0.000	0.250	0.380	0.060
HIGH	0.050	1.130	1.010	1.575	2.870	0.030	0.130	3.880	96.88	0.130	0.250	0.630	0.810	0.750	0.630

SALMON, CHINOOK (KING) ONCORHYNCHUS TSHAWYTSCHS 179020 AREA- ALASKA SITE- K4 MUSCLE

LENGTH NUM 5 MEAN 0.942 S. D. 0.062 LOW 0.860 HIGH 1.004
WEIGHT NUM 5 MEAN 13.336 S. D. 5.552 LOW 6.350 HIGH 21.319

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0001	0004	0002	0000	0000	0000
MEAN	0.065	0.245	0.095	2.242	0.461	0.025	0.119	0.454	5.25	0.238	0.280	0.177	0.121	0.882	0.410
S. D.	0.021	0.169	0.052	0.910	0.086	0.006	0.052	0.169	0.77	0.150	0.000	0.049	0.096	0.391	0.214
LOW	0.050	0.020	0.040	1.200	0.400	0.020	0.070	0.333	4.10	0.100	0.000	0.120	0.050	0.550	0.050
HIGH	0.100	0.486	0.170	3.525	0.610	0.030	0.203	0.750	6.10	0.430	0.280	0.210	0.290	1.450	0.575

SALMON, CHINOOK (KING) ONCORHYNCHUS TSHAWYTSCHS 179020 AREA- ALASKA SITE- K4 LIVER

LENGTH NUM 1 MEAN 0.942 S. D. 0.000 LOW 0.942 HIGH 0.942
WEIGHT NUM 1 MEAN 13.336 S. D. 0.000 LOW 13.336 HIGH 13.336

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.020	0.250	1.190	2.275	1.570	0.030	0.130	36.880	21.88	0.230	0.440	0.130	0.690	0.380	0.880
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.250	1.190	2.275	1.570	0.030	0.130	36.880	21.88	0.230	0.440	0.130	0.690	0.380	0.880

SALMON, CHINOOK (KING) ONCORHYNCHUS TSHAWYTSCHS 179020 AREA- ALASKA SITE- 04 MUSCLE

LENGTH NUM 10 MEAN 0.843 S. D. 0.074 LOW 0.730 HIGH 0.980
WEIGHT NUM 10 MEAN 8.479 S. D. 1.875 LOW 5.675 HIGH 11.804

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0008	0000	0000	0000	0000	0000	0000	0001	0000	0000	0008	0007	0000	0000	0001
MEAN	0.020	0.589	0.052	1.804	0.422	0.024	0.223	0.193	4.00	0.152	0.220	0.160	0.087	0.525	0.511
S. D.	0.000	0.372	0.018	0.893	0.133	0.013	0.182	0.064	0.64	0.067	0.042	0.030	0.028	0.194	0.183
LOW	0.020	0.220	0.030	0.540	0.205	0.010	0.060	0.130	3.12	0.060	0.190	0.130	0.060	0.130	0.295
HIGH	0.020	1.530	0.080	3.550	0.590	0.050	0.630	0.290	5.28	0.250	0.250	0.190	0.150	0.750	0.810

SALMON, CHINOOK (KING) ONCORHYNCHUS TSHAWYTSCHS 179020 AREA- ALASKA SITE- 04 LIVER

LENGTH NUM 10 MEAN 0.843 S. D. 0.074 LOW 0.730 HIGH 0.980
WEIGHT NUM 10 MEAN 8.479 S. D. 1.875 LOW 5.675 HIGH 11.804

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0009	0010	0009	0006	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0010	0000	0000	0000	0000	0002	0001	0000	0000	0000	0001	0009	0000	0000	0001
MEAN	0.000	0.460	0.221	1.612	2.275	0.039	0.123	11.926	30.23	0.209	0.358	0.190	0.737	0.664	0.583
S. D.	0.000	0.175	0.141	1.198	1.287	0.016	0.042	6.868	14.00	0.099	0.190	0.000	0.361	0.308	0.235
LOW	0.000	0.190	0.060	0.600	1.150	0.020	0.060	2.060	10.00	0.060	0.160	0.000	0.320	0.190	0.220
HIGH	0.000	0.690	0.540	3.650	4.800	0.060	0.190	24.630	62.50	0.430	0.690	0.190	1.410	1.190	0.940

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

TROUT, CUTTHROAT SALMO CLARKI 179028 AREA- PACIFIC NORTHWEST SITE- N4 MUSCLE

LENGTH NUM 3 MEAN 0.453 S. D. 0.029 LOW 0.420 HIGH 0.470
WEIGHT NUM 3 MEAN 0.848 S. D. 0.189 LOW 0.636 HIGH 1.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0003	0000	0000	0000
MEAN	0.302	0.353	0.038	1.447	0.288	0.022	0.397	0.575	4.67	0.167	0.190	0.000	0.115	0.510	0.475
S. D.	0.212	0.071	0.008	0.763	0.103	0.013	0.307	0.071	0.37	0.039	0.000	0.000	0.048	0.140	0.145
LOW	0.160	0.310	0.030	0.950	0.215	0.010	0.190	0.500	4.25	0.135	0.000	0.000	0.085	0.375	0.330
HIGH	0.545	0.435	0.045	2.325	0.360	0.035	0.750	0.640	4.90	0.210	0.190	0.000	0.170	0.655	0.620

TROUT, RAINBOW (STEELHEAD) SALMO GAIRDNERI 179029 AREA- PACIFIC NORTHWEST SITE- N2 MUSCLE

LENGTH NUM 3 MEAN 0.760 S. D. 0.114 LOW 0.680 HIGH 0.890
WEIGHT NUM 3 MEAN 3.950 S. D. 1.968 LOW 2.724 HIGH 6.220

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0002	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0000	0000
MEAN	0.000	0.710	0.055	2.063	0.300	0.013	0.180	0.522	3.00	0.167	0.000	0.000	0.087	0.772	0.715
S. D.	0.000	0.035	0.007	0.602	0.174	0.006	0.106	0.439	0.32	0.058	0.000	0.000	0.025	0.376	0.093
LOW	0.000	0.690	0.050	1.550	0.100	0.010	0.060	0.190	2.63	0.100	0.000	0.000	0.060	0.440	0.610
HIGH	0.000	0.750	0.060	2.725	0.420	0.020	0.260	1.020	3.19	0.200	0.000	0.000	0.110	1.180	0.785

TROUT, RAINBOW (STEELHEAD) SALMO GAIRDNERI 179029 AREA- PACIFIC NORTHWEST SITE- N2 LIVER

LENGTH NUM 1 MEAN 0.890 S. D. 0.000 LOW 0.890 HIGH 0.890
WEIGHT NUM 1 MEAN 6.220 S. D. 0.000 LOW 6.220 HIGH 6.220

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.000	0.250	0.410	0.700	0.000	0.540	0.030	40.630	16.88	0.160	0.310	0.000	0.890	0.750	0.750
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.250	0.410	0.700	0.000	0.540	0.030	40.630	16.88	0.160	0.310	0.000	0.890	0.750	0.750

TROUT, RAINBOW (STEELHEAD) SALMO GAIRDNERI 179029 AREA- PACIFIC NORTHWEST SITE- N4 MUSCLE

LENGTH NUM 6 MEAN 0.708 S. D. 0.017 LOW 0.690 HIGH 0.740
WEIGHT NUM 6 MEAN 3.193 S. D. 0.233 LOW 2.951 HIGH 3.587

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0005	0000	0000	0000
MEAN	0.063	0.407	0.052	1.725	0.354	0.026	0.123	0.329	2.95	0.173	0.175	0.060	0.115	0.518	0.498
S. D.	0.036	0.189	0.012	1.286	0.128	0.013	0.059	0.227	0.60	0.039	0.021	0.000	0.058	0.358	0.113
LOW	0.030	0.220	0.040	0.300	0.150	0.010	0.060	0.045	2.25	0.105	0.160	0.000	0.075	0.060	0.390
HIGH	0.110	0.750	0.070	3.600	0.530	0.040	0.220	0.700	3.81	0.210	0.190	0.060	0.230	1.010	0.705

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- E9 MUSCLE

LENGTH NUM 1 MEAN 1.070 S. D. 0.000 LOW 1.070 HIGH 1.070
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.400	0.190	0.045	5.840	0.785	0.035	0.060	0.190	12.64	0.285	0.000	0.000	0.085	1.090	0.440
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.400	0.190	0.045	5.840	0.785	0.035	0.060	0.190	12.64	0.285	0.000	0.000	0.085	1.090	0.440

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- E9 LIVER

LENGTH NUM 1 MEAN 1.070 S. D. 0.000 LOW 1.070 HIGH 1.070
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.270	0.440	3.160	13.375	2.530	0.060	0.060	65.630	31.88	0.990	0.130	0.810	0.660	0.220	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.270	0.440	3.160	13.375	2.530	0.060	0.060	65.630	31.88	0.990	0.130	0.810	0.660	0.220	0.630

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- I5 MUSCLE

LENGTH NUM 14 MEAN 0.705 S. D. 0.250 LOW 0.239 HIGH 1.020
WEIGHT NUM 6 MEAN 1.490 S. D. 1.312 LOW 0.129 HIGH 3.263

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0013	0014	0014	0014	0014	0014	0013	0014	0014	0014	0014	0013	0014	0014
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0009	0011	0000	0002	0000
MEAN	0.182	0.332	0.070	3.780	0.843	0.037	0.159	0.334	7.30	0.204	0.164	0.070	0.216	0.643	0.664
S. D.	0.147	0.164	0.040	1.641	0.604	0.019	0.118	0.255	2.63	0.117	0.036	0.017	0.071	0.146	0.270
LOW	0.020	0.120	0.035	0.770	0.200	0.010	0.050	0.060	3.25	0.060	0.120	0.060	0.080	0.380	0.335
HIGH	0.560	0.730	0.170	6.600	2.500	0.090	0.500	1.060	11.93	0.510	0.190	0.090	0.350	0.810	1.310

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- I5 LIVER

LENGTH	NUM	4	MEAN	0.916	S. D.	0.085	LOW	0.842	HIGH	1.020
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000	0000	0000	0000
MEAN	0.073	0.359	0.998	4.752	2.144	0.051	0.110	7.764	22.58	0.200	0.220	0.438	0.524	0.370	0.474
S. D.	0.040	0.128	0.528	2.070	1.071	0.037	0.063	3.089	4.57	0.064	0.042	0.322	0.094	0.115	0.147
LOW	0.030	0.190	0.570	1.912	0.980	0.010	0.060	5.000	18.75	0.140	0.190	0.090	0.440	0.220	0.310
HIGH	0.110	0.500	1.690	6.883	3.576	0.100	0.190	12.185	27.81	0.290	0.250	0.780	0.640	0.500	0.630

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- I9 MUSCLE

LENGTH	NUM	1	MEAN	1.000	S. D.	0.000	LOW	1.000	HIGH	1.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.225	0.380	0.065	5.550	0.700	0.030	0.155	0.320	10.09	0.145	0.000	0.000	0.095	0.395	0.310
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.225	0.380	0.065	5.550	0.700	0.030	0.155	0.320	10.09	0.145	0.000	0.000	0.095	0.395	0.310

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- I9 LIVER

LENGTH	NUM	1	MEAN	1.000	S. D.	0.000	LOW	1.000	HIGH	1.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.110	0.500	2.030	4.350	1.370	0.330	0.060	18.750	27.50	0.260	0.310	0.310	0.660	0.380	0.060
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.110	0.500	2.030	4.350	1.370	0.330	0.060	18.750	27.50	0.260	0.310	0.310	0.660	0.380	0.060

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- J3 MUSCLE

LENGTH	NUM	2	MEAN	0.688	S. D.	0.145	LOW	0.585	HIGH	0.790
WEIGHT	NUM	1	MEAN	2.182	S. D.	0.000	LOW	2.182	HIGH	2.182

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.190	0.310	0.175	27.058	0.890	0.020	0.095	0.048	7.35	0.155	0.000	0.470	0.178	0.440	0.523
S. D.	0.184	0.000	0.021	35.981	0.113	0.000	0.049	0.018	0.22	0.049	0.000	0.000	0.088	0.085	0.053
LOW	0.060	0.000	0.160	1.615	0.810	0.000	0.060	0.035	7.19	0.120	0.000	0.000	0.115	0.380	0.485
HIGH	0.320	0.310	0.190	52.500	0.970	0.020	0.130	0.060	7.50	0.190	0.000	0.470	0.240	0.500	0.560

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- J3 LIVER

LENGTH	NUM	1	MEAN	0.790	S. D.	0.000	LOW	0.790	HIGH	0.790
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH.	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000
MEAN	0.000	0.250	0.720	4.500	2.520	0.120	0.060	17.500	34.38	0.280	0.000	1.500	0.960	0.500	0.380
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.250	0.720	4.500	2.520	0.120	0.060	17.500	34.38	0.280	0.000	1.500	0.960	0.500	0.380

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- J5 MUSCLE

LENGTH	NUM	2	MEAN	0.810	S. D.	0.000	LOW	0.810	HIGH	0.810
WEIGHT	NUM	1	MEAN	5.425	S. D.	0.000	LOW	5.425	HIGH	5.425

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.220	0.435	0.075	5.803	1.320	0.015	0.060	0.325	8.00	0.305	0.000	0.000	0.075	0.560	0.630
S. D.	0.127	0.262	0.021	3.539	0.099	0.007	0.000	0.078	1.15	0.120	0.000	0.000	0.021	0.354	0.000
LOW	0.130	0.250	0.060	3.300	1.250	0.010	0.060	0.270	7.19	0.220	0.000	0.000	0.060	0.310	0.000
HIGH	0.310	0.620	0.090	8.305	1.390	0.020	0.060	0.380	8.81	0.390	0.000	0.000	0.090	0.810	0.630

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- J5 LIVER

LENGTH	NUM	1	MEAN	0.810	S. D.	0.000	LOW	0.810	HIGH	0.810
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0000	0001	0001	0001	0001	0000	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.050	0.250	2.540	8.600	3.400	0.110	0.190	0.000	33.12	0.360	0.810	0.560	0.000	0.310	0.620
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.050	0.250	2.540	8.600	3.400	0.110	0.190	0.000	33.12	0.360	0.810	0.560	0.000	0.310	0.620

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- J6 MUSCLE

LENGTH NUM 9 MEAN 0.627 S. D. 0.197 LOW 0.315 HIGH 0.910
WEIGHT NUM 5 MEAN 1.492 S. D. 1.107 LOW 0.350 HIGH 2.983

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0009	0008	0000	0002	0000
MEAN	0.069	0.307	0.054	8.328	1.048	0.031	0.131	0.238	7.03	0.183	0.000	0.440	0.167	0.458	0.442
S. D.	0.047	0.106	0.018	5.335	0.400	0.006	0.053	0.116	3.38	0.058	0.000	0.000	0.097	0.190	0.183
LOW	0.020	0.190	0.010	2.850	0.505	0.020	0.065	0.040	0.25	0.090	0.000	0.000	0.080	0.190	0.310
HIGH	0.130	0.500	0.075	18.500	1.650	0.040	0.250	0.410	13.31	0.280	0.000	0.440	0.380	0.810	0.910

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- J6 LIVER

LENGTH NUM 2 MEAN 0.855 S. D. 0.078 LOW 0.800 HIGH 0.910
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.100	0.345	0.915	6.883	3.145	0.235	0.160	24.125	32.97	1.395	0.095	1.300	0.835	0.565	0.300
S. D.	0.000	0.219	0.460	0.647	1.209	0.007	0.042	1.237	8.53	1.280	0.035	1.259	0.092	0.092	0.057
LOW	0.000	0.190	0.590	6.425	2.290	0.230	0.130	23.250	26.94	0.490	0.070	0.410	0.770	0.500	0.260
HIGH	0.100	0.500	1.240	7.340	4.000	0.240	0.190	25.000	39.00	2.300	0.120	2.190	0.900	0.630	0.340

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- K1 MUSCLE

LENGTH NUM 4 MEAN 0.586 S. D. 0.234 LOW 0.318 HIGH 0.820
WEIGHT NUM 2 MEAN 0.683 S. D. 0.539 LOW 0.302 HIGH 1.064

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0006	0004	0000	0000	0000
MEAN	0.103	0.383	0.058	3.797	0.645	0.023	0.134	0.258	7.35	0.170	0.000	0.220	0.108	0.737	0.411
S. D.	0.072	0.120	0.012	1.077	0.222	0.012	0.132	0.229	1.65	0.051	0.000	0.042	0.021	0.208	0.098
LOW	0.030	0.250	0.040	2.100	0.450	0.010	0.040	0.050	5.22	0.100	0.000	0.190	0.080	0.530	0.310
HIGH	0.220	0.565	0.070	4.875	0.945	0.040	0.365	0.695	9.44	0.255	0.000	0.250	0.135	1.070	0.540

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- K1 LIVER

LENGTH NUM 1 MEAN 0.820 S. D. 0.000 LOW 0.820 HIGH 0.820
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.040	0.440	1.560	2.400	0.950	0.030	0.310	12.500	31.88	0.230	0.380	1.440	1.240	0.380	0.310
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.040	0.440	1.560	2.400	0.950	0.030	0.310	12.500	31.88	0.230	0.380	1.440	1.240	0.380	0.310

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- K2 MUSCLE

LENGTH NUM 7 MEAN 0.690 S. D. 0.203 LOW 0.445 HIGH 0.980
WEIGHT NUM 6 MEAN 2.839 S. D. 2.061 LOW 0.774 HIGH 5.897

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0008
N DET.	0000	0000	0001	0000	0001	0001	0000	0000	0000	0001	0008	0007	0000	0003	0000
MEAN	0.165	0.318	0.065	5.810	0.658	0.029	0.203	0.494	8.22	0.211	0.060	0.213	0.119	0.671	0.511
S. D.	0.156	0.088	0.028	4.677	0.284	0.014	0.130	0.506	2.81	0.102	0.000	0.166	0.037	0.260	0.136
LOW	0.025	0.190	0.030	1.700	0.320	0.015	0.060	0.150	3.50	0.070	0.000	0.095	0.065	0.320	0.375
HIGH	0.450	0.500	0.120	14.250	1.090	0.060	0.493	1.795	12.07	0.410	0.060	0.330	0.170	1.000	0.720

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- K2 LIVER

LENGTH NUM 1 MEAN 0.820 S. D. 0.000 LOW 0.820 HIGH 0.820
WEIGHT NUM 1 MEAN 4.536 S. D. 0.000 LOW 4.536 HIGH 4.536

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0000	0000	0001	0001	0001	0001	0001	0001	0001	0001	0001	0000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.080	0.630	1.690	0.000	0.000	0.060	0.030	7.880	13.13	0.160	0.220	0.090	0.630	0.250	0.000
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.080	0.630	1.690	0.000	0.000	0.060	0.030	7.880	13.13	0.160	0.220	0.090	0.630	0.250	0.000

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- K4 MUSCLE

LENGTH NUM 11 MEAN 0.788 S. D. 0.204 LOW 0.363 HIGH 0.980
WEIGHT NUM 3 MEAN 1.412 S. D. 1.057 LOW 0.483 HIGH 2.562

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0010	0011	0011	0011	0011	0011	0010	0011	0011	0011	0011	0011	0011	0011
N DET.	0000	0000	0000	0000	0000	0001	0002	0000	0000	0000	0009	0006	0000	0002	0000
MEAN	0.192	0.299	0.072	7.936	0.900	0.032	0.192	0.192	9.04	0.195	0.075	0.258	0.164	0.487	0.486
S. D.	0.175	0.132	0.042	6.790	0.338	0.006	0.194	0.062	2.31	0.037	0.021	0.117	0.066	0.145	0.200
LOW	0.020	0.040	0.040	1.220	0.180	0.020	0.060	0.090	5.56	0.135	0.060	0.130	0.105	0.345	0.185
HIGH	0.635	0.535	0.190	23.116	1.385	0.040	0.690	0.285	12.72	0.260	0.090	0.440	0.325	0.810	0.880

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- K4 LIVER

LENGTH NUM 2 MEAN 0.910 S. D. 0.014 LOW 0.900 HIGH 0.920
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.195	0.895	4.105	26.698	4.608	0.105	0.140	21.140	43.50	0.365	0.205	2.720	1.150	0.420	0.360
S. D.	0.092	0.290	3.811	34.121	0.555	0.021	0.014	2.461	4.95	0.035	0.021	1.372	0.170	0.113	0.198
LOW	0.130	0.690	1.410	2.570	4.215	0.090	0.130	19.400	40.00	0.340	0.190	1.750	1.030	0.340	0.220
HIGH	0.260	1.100	6.800	50.825	5.000	0.120	0.150	22.880	47.00	0.390	0.220	3.690	1.270	0.500	0.500

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- K5 MUSCLE

LENGTH NUM 2 MEAN 0.820 S. D. 0.000 LOW 0.820 HIGH 0.820
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	0000	0002	0000	0000	0000
MEAN	0.090	0.405	0.045	5.503	0.840	0.030	0.310	0.285	8.02	0.250	0.095	0.000	0.330	0.660	0.720
S. D.	0.057	0.219	0.007	3.285	0.552	0.014	0.000	0.134	0.74	0.028	0.049	0.000	0.212	0.042	0.127
LOW	0.050	0.250	0.040	3.180	0.450	0.020	0.000	0.190	7.50	0.230	0.060	0.000	0.180	0.630	0.630
HIGH	0.130	0.560	0.050	7.825	1.230	0.040	0.310	0.380	8.54	0.270	0.130	0.000	0.480	0.690	0.810

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- K5 LIVER

LENGTH NUM 1 MEAN 0.795 S. D. 0.000 LOW 0.795 HIGH 0.795
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.075	0.560	2.845	3.125	2.470	0.070	0.155	12.970	37.81	0.300	0.470	2.360	1.300	0.655	0.545
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.075	0.560	2.845	3.125	2.470	0.070	0.155	12.970	37.81	0.300	0.470	2.360	1.300	0.655	0.545

WOLFFISH, ATL. ANARHICHAS LUPUS 183002 AREA- NORTH ATLANTIC SITE- K6 MUSCLE

LENGTH NUM 3 MEAN 0.630 S. D. 0.075 LOW 0.560 HIGH 0.710
WEIGHT NUM 3 MEAN 2.858 S. D. 1.009 LOW 1.885 HIGH 3.900

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0002	0000
MEAN	0.230	0.397	0.092	7.160	0.392	0.028	0.158	0.227	5.32	0.213	0.000	0.000	0.112	0.500	0.512
S. D.	0.078	0.131	0.010	3.665	0.193	0.003	0.053	0.130	1.56	0.025	0.000	0.000	0.045	0.000	0.094
LOW	0.175	0.250	0.080	2.930	0.170	0.025	0.125	0.100	3.87	0.190	0.000	0.000	0.070	0.000	0.410
HIGH	0.285	0.500	0.100	9.400	0.525	0.030	0.220	0.360	6.97	0.240	0.000	0.000	0.160	0.500	0.595

TAUTOG TAUTOGA ONITIS 185022 AREA- NORTH ATLANTIC SITE- I7 MUSCLE

LENGTH NUM 9 MEAN 0.441 S. D. 0.059 LOW 0.354 HIGH 0.554
WEIGHT NUM 9 MEAN 1.910 S. D. 0.747 LOW 1.135 HIGH 3.632

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0008	0008	0007	0009	0009	0009	0009	0009
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0006	0000	0000	0000
MEAN	0.253	0.526	0.076	2.458	0.444	0.041	0.167	0.370	4.07	0.176	0.206	0.470	0.244	0.706	0.620
S. D.	0.092	0.261	0.042	0.708	0.257	0.036	0.076	0.253	1.06	0.034	0.138	0.255	0.179	0.279	0.191
LOW	0.130	0.250	0.035	1.725	0.140	0.020	0.040	0.130	2.75	0.135	0.060	0.250	0.070	0.380	0.380
HIGH	0.375	1.000	0.180	3.775	0.970	0.130	0.290	0.940	6.06	0.230	0.380	0.750	0.560	1.310	1.000

TAUTOG TAUTOGA ONITIS 185022 AREA- NORTH ATLANTIC SITE- N7 MUSCLE

LENGTH NUM 5 MEAN 0.371 S. D. 0.037 LOW 0.330 HIGH 0.430
WEIGHT NUM 5 MEAN 1.309 S. D. 0.316 LOW 0.984 HIGH 1.816

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0005	0000	0000	0000
MEAN	0.330	0.488	0.049	1.678	0.626	0.030	0.092	0.141	4.49	0.180	0.000	0.000	0.208	0.555	0.460
S. D.	0.076	0.082	0.011	1.011	0.106	0.007	0.036	0.079	0.44	0.041	0.000	0.000	0.067	0.131	0.082
LOW	0.210	0.440	0.030	0.737	0.455	0.020	0.060	0.060	4.00	0.140	0.000	0.000	0.105	0.440	0.330
HIGH	0.420	0.630	0.060	3.340	0.725	0.040	0.130	0.230	5.09	0.240	0.000	0.000	0.280	0.750	0.550

ABALONE, GREEN HALIOTIS FULGENS 187005 AREA- CALIFORNIA SITE- K3 SHUCKED

LENGTH NUM 8 MEAN 0.175 S. D. 0.005 LOW 0.168 HIGH 0.180
WEIGHT NUM 10 MEAN 0.803 S. D. 0.151 LOW 0.550 HIGH 1.060

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010
N DET.	0006	0000	0000	0000	0001	0000	0000	0000	0000	0000	0001	0002	0000	0001	0000
MEAN	0.029	0.838	2.434	14.259	0.167	0.640	0.431	2.845	18.04	2.930	0.789	0.236	0.556	0.963	1.053
S. D.	0.012	0.209	0.693	9.300	0.113	0.323	0.124	1.086	4.53	1.531	0.204	0.134	0.223	0.365	0.319
LOW	0.020	0.560	1.360	3.000	0.020	0.130	0.250	1.190	10.00	0.320	0.575	0.060	0.300	0.250	0.750
HIGH	0.045	1.190	3.500	27.000	0.340	1.140	0.630	4.940	26.07	6.175	1.190	0.470	0.880	1.560	1.735

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

ABALONE, RED   HALIOTIS RUFESCENS   187008   AREA- CALIFORNIA   SITE- E3   SHUCKED

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	10	0.181	0.007	0.170	0.190
WEIGHT	10	1.001	0.116	0.808	1.205

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0008	0009	0010	0010	0010	0010	0010	0009	0009	0010	0010	0009
N DET.	0005	0001	0001	0000	0002	0001	0000	0000	0000	0001	0007	0007	0000	0002	0000
MEAN	0.078	0.554	0.188	13.991	0.381	0.139	0.201	0.740	7.91	1.588	0.400	0.485	0.245	1.074	0.928
S. D.	0.051	0.180	0.061	8.124	0.461	0.064	0.089	0.214	2.68	0.872	0.311	0.191	0.126	0.461	0.305
LOW	0.020	0.330	0.110	4.300	0.100	0.070	0.040	0.416	4.11	0.140	0.180	0.350	0.030	0.600	0.650
HIGH	0.130	0.790	0.310	24.100	1.380	0.250	0.333	1.090	13.93	2.700	0.620	0.620	0.460	2.000	1.475

SQUID, ATL. LONGFINNED   LOLIGO PEALII   188003   AREA- NORTH ATLANTIC   SITE- I7   MANTLE, SKINLESS

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	10	0.152	0.053	0.105	0.273
WEIGHT	10	0.078	0.036	0.039	0.148

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0008	0000	0001	0000
MEAN	0.078	0.386	0.083	4.142	0.471	0.066	0.175	9.261	11.37	0.267	0.190	0.410	0.357	0.580	0.631
S. D.	0.047	0.224	0.024	1.696	0.184	0.019	0.076	3.827	2.37	0.059	0.000	0.085	0.101	0.290	0.248
LOW	0.040	0.160	0.060	1.200	0.090	0.035	0.095	3.655	7.34	0.180	0.000	0.350	0.260	0.190	0.380
HIGH	0.170	0.845	0.125	6.650	0.730	0.090	0.345	16.630	16.25	0.380	0.190	0.470	0.585	0.860	1.220

SQUID, ATL. LONGFINNED   LOLIGO PEALII   188003   AREA- NORTH ATLANTIC   SITE- J7   MANTLE, SKINLESS

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	3	0.078	0.010	0.067	0.086
WEIGHT	3	0.020	0.005	0.017	0.025

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.020	0.447	0.142	1.717	0.813	0.075	0.208	3.737	11.21	0.255	0.170	0.270	0.382	0.800	0.710
S. D.	0.000	0.080	0.025	0.714	0.329	0.038	0.201	0.528	3.63	0.143	0.000	0.000	0.071	0.240	0.269
LOW	0.000	0.370	0.125	0.920	0.450	0.035	0.090	3.130	7.25	0.090	0.000	0.000	0.320	0.630	0.470
HIGH	0.020	0.530	0.170	2.300	1.090	0.110	0.440	4.090	14.38	0.350	0.170	0.270	0.460	0.970	1.000

SQUID, ATL. LONGFINNED   LOLIGO PEALII   188003   AREA- NORTH ATLANTIC   SITE- J8   MANTLE, SKINLES

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	17	0.168	0.044	0.105	0.250
WEIGHT	17	0.140	0.082	0.047	0.317

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0017	0017	0017	0017	0016	0017	0017	0017	0017	0017	0017	0017	0017	0017	0017
N DET.	0007	0000	0000	0000	0000	0000	0001	0000	0000	0000	0005	0016	0000	0017	0000
MEAN	0.053	0.613	0.112	3.615	0.267	0.053	0.331	2.597	11.31	0.303	0.322	0.170	0.183	0.000	0.607
S. D.	0.031	0.248	0.028	3.445	0.114	0.018	0.262	1.093	0.97	0.087	0.082	0.000	0.025	0.000	0.104
LOW	0.020	0.310	0.080	0.450	0.080	0.020	0.120	0.240	9.19	0.150	0.190	0.000	0.140	0.000	0.380
HIGH	0.110	1.060	0.180	15.576	0.500	0.080	0.940	4.345	12.50	0.470	0.450	0.170	0.220	0.000	0.795

SQUID, ATL. LONGFINNED   LOLIGO PEALII   188003   AREA- NORTH ATLANTIC   SITE- N1   MANTLE, SKINLES

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	2	0.115	0.023	0.099	0.131
WEIGHT	2	0.060	0.031	0.038	0.082

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.000	0.590	0.145	4.975	0.775	0.070	0.315	5.375	12.75	0.365	0.000	0.250	0.345	1.500	0.755
S. D.	0.000	0.042	0.021	0.672	0.035	0.042	0.262	0.262	1.41	0.007	0.000	0.000	0.092	0.000	0.177
LOW	0.000	0.560	0.130	4.500	0.750	0.040	0.130	5.190	11.75	0.360	0.000	0.000	0.280	1.500	0.630
HIGH	0.000	0.620	0.160	5.450	0.800	0.100	0.500	5.560	13.75	0.370	0.000	0.250	0.410	1.500	0.880

SQUID, ATL. LONGFINNED   LOLIGO PEALII   188003   AREA- NORTH ATLANTIC   SITE- N2   MANTLE, SKINLESS

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	3	0.134	0.034	0.102	0.169
WEIGHT	3	0.076	0.045	0.036	0.125

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0002	0003	0003	0003	0003	0003	0003	0003	0002
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0001	0000
MEAN	0.030	0.545	0.155	1.505	0.458	0.098	0.105	6.742	9.60	0.422	0.000	0.000	0.405	0.640	0.988
S. D.	0.014	0.192	0.067	0.342	0.157	0.038	0.035	1.823	1.68	0.146	0.000	0.000	0.160	0.283	0.640
LOW	0.020	0.380	0.100	1.306	0.290	0.065	0.080	5.190	7.69	0.255	0.000	0.000	0.310	0.440	0.535
HIGH	0.040	0.755	0.230	1.900	0.600	0.140	0.130	8.750	10.85	0.530	0.000	0.000	0.590	0.840	1.440

SQUID, ATL. LONGFINNED   LOLIGO PEALII   188003   AREA- NORTH ATLANTIC   SITE- N3   MANTLE, SKINLESS

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	13	0.139	0.054	0.068	0.214
WEIGHT	13	0.098	0.066	0.022	0.206

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0012	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0013	0012
N DET.	0007	0000	0000	0000	0000	0001	0000	0000	0000	0000	0012	0013	0000	0010	0000
MEAN	0.048	0.574	0.158	3.420	0.483	0.087	0.223	6.537	11.19	0.265	0.250	0.000	0.262	0.833	0.530
S. D.	0.046	0.253	0.072	1.350	0.158	0.044	0.154	3.852	2.54	0.095	0.000	0.000	0.085	0.286	0.112
LOW	0.020	0.300	0.060	0.865	0.245	0.010	0.060	1.440	6.06	0.090	0.000	0.000	0.120	0.560	0.310
HIGH	0.140	0.970	0.310	6.000	0.730	0.170	0.630	12.935	16.47	0.420	0.250	0.000	0.485	1.130	0.690

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

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LOCATION LEVEL 5

SQUID, ATL. LONGFINNED LOLIGO PEALII 188003 AREA- NORTH ATLANTIC SITE- N5 MANTLE, SKINLESS

LENGTH	NUM	5	MEAN	0.112	S. D.	0.027	LOW	0.081	HIGH	0.151
WEIGHT	NUM	5	MEAN	0.048	S. D.	0.027	LOW	0.020	HIGH	0.089

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0005	0000	0005	0000
MEAN	0.023	0.628	0.168	2.574	0.551	0.069	0.275	7.814	15.98	0.311	0.130	0.000	0.285	0.000	0.793
S. D.	0.006	0.164	0.016	1.438	0.304	0.019	0.304	2.235	2.39	0.022	0.000	0.000	0.059	0.000	0.190
LOW	0.020	0.380	0.150	1.533	0.170	0.040	0.060	4.630	13.93	0.285	0.000	0.000	0.230	0.000	0.630
HIGH	0.030	0.815	0.190	5.000	0.815	0.090	0.810	10.750	18.75	0.340	0.130	0.000	0.350	0.000	1.000

SQUID, ATL. LONGFINNED LOLIGO PEALII 188003 AREA- NORTH ATLANTIC SITE- N7 MANTLE, SKINLESS

LENGTH	NUM	7	MEAN	0.115	S. D.	0.029	LOW	0.077	HIGH	0.160
WEIGHT	NUM	7	MEAN	0.055	S. D.	0.030	LOW	0.021	HIGH	0.107

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0006	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0005	0000	0004	0000
MEAN	0.088	0.456	0.156	1.973	0.439	0.081	0.184	5.332	10.44	0.289	0.310	0.175	0.309	0.553	0.757
S. D.	0.056	0.205	0.067	1.443	0.213	0.019	0.065	1.691	2.86	0.074	0.000	0.064	0.098	0.373	0.223
LOW	0.040	0.190	0.080	0.840	0.100	0.065	0.120	2.880	4.69	0.150	0.000	0.130	0.195	0.250	0.440
HIGH	0.150	0.810	0.270	4.925	0.670	0.120	0.280	7.560	13.62	0.395	0.310	0.220	0.455	0.970	1.080

SQUID, ATL. LONGFINNED LOLIGO PEALII 188003 AREA- NORTH ATLANTIC SITE- N8 MANTLE, SKINLESS

LENGTH	NUM	11	MEAN	0.202	S. D.	0.018	LOW	0.179	HIGH	0.242
WEIGHT	NUM	11	MEAN	0.183	S. D.	0.046	LOW	0.127	HIGH	0.290

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0008	0009	0000	0011	0000
MEAN	0.038	0.494	0.205	4.283	0.786	0.059	0.234	5.851	15.22	0.278	0.090	0.205	0.244	0.000	0.574
S. D.	0.017	0.183	0.081	1.209	0.228	0.016	0.091	3.192	3.97	0.068	0.000	0.064	0.067	0.000	0.124
LOW	0.020	0.310	0.050	3.025	0.460	0.040	0.130	0.250	3.94	0.180	0.090	0.160	0.080	0.000	0.310
HIGH	0.060	0.815	0.365	7.250	1.160	0.090	0.440	9.285	18.12	0.405	0.090	0.250	0.330	0.000	0.810

SQUID, ATL. LONGFINNED LOLIGO PEALII 188003 AREA- NORTH ATLANTIC SITE- O1 MANTLE, SKINLESS

LENGTH	NUM	20	MEAN	0.132	S. D.	0.036	LOW	0.087	HIGH	0.195
WEIGHT	NUM	20	MEAN	0.077	S. D.	0.051	LOW	0.023	HIGH	0.183

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020
N DET.	0013	0000	0000	0000	0000	0000	0000	0000	0000	0000	0019	0015	0000	0018	0000
MEAN	0.100	0.571	0.135	2.938	0.593	0.072	0.261	3.962	12.40	0.292	0.190	0.292	0.256	0.845	0.614
S. D.	0.133	0.227	0.036	1.726	0.345	0.052	0.199	2.208	1.52	0.066	0.000	0.115	0.088	0.219	0.131
LOW	0.020	0.250	0.060	0.983	0.110	0.030	0.060	0.190	9.47	0.110	0.000	0.160	0.080	0.690	0.330
HIGH	0.390	1.250	0.195	8.750	1.800	0.280	0.880	10.500	15.38	0.380	0.190	0.440	0.480	1.000	0.880

SQUID, ATL. LONGFINNED LOLIGO PEALII 188003 AREA- NORTH ATLANTIC SITE- P1 WHOLE

LENGTH	NUM	23	MEAN	0.197	S. D.	0.050	LOW	0.108	HIGH	0.300
WEIGHT	NUM	23	MEAN	0.147	S. D.	0.073	LOW	0.036	HIGH	0.298

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0023	0022	0023	0023	0022	0023	0023	0022	0023	0023	0023	0023	0023	0023	0023
N DET.	0009	0000	0000	0000	0000	0000	0000	0000	0000	0000	0015	0015	0000	0000	0000
MEAN	0.050	0.576	0.163	6.744	0.801	0.167	0.399	38.365	17.00	0.300	0.133	0.269	0.385	0.855	0.724
S. D.	0.037	0.181	0.042	2.603	0.232	0.092	0.490	19.888	5.52	0.098	0.070	0.166	0.112	0.256	0.231
LOW	0.020	0.345	0.100	2.280	0.480	0.070	0.060	6.530	6.75	0.110	0.060	0.060	0.190	0.390	0.220
HIGH	0.125	1.030	0.245	13.750	1.440	0.460	2.190	76.565	31.25	0.610	0.250	0.590	0.580	1.380	1.140

SQUID, ATL. LONGFINNED LOLIGO PEALII 188003 AREA- NORTH ATLANTIC SITE- P2 MANTLE, SKINLESS

LENGTH	NUM	7	MEAN	0.138	S. D.	0.040	LOW	0.099	HIGH	0.210
WEIGHT	NUM	7	MEAN	0.083	S. D.	0.059	LOW	0.033	HIGH	0.200

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0006	0007	0007	0007	0007	0007	0006
N DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0006	0000	0002	0000
MEAN	0.140	0.863	0.138	3.869	0.353	0.069	0.373	3.283	12.95	0.272	0.220	0.160	0.242	0.996	0.743
S. D.	0.028	0.396	0.044	2.249	0.111	0.042	0.286	1.490	0.97	0.066	0.000	0.000	0.091	0.198	0.301
LOW	0.120	0.440	0.090	1.275	0.260	0.040	0.060	1.690	11.63	0.180	0.000	0.000	0.190	0.750	0.515
HIGH	0.160	1.380	0.210	7.140	0.560	0.160	0.760	5.440	14.19	0.370	0.220	0.160	0.430	1.250	1.310

SQUID, ATL. LONGFINNED LOLIGO PEALII 188003 AREA- NORTH ATLANTIC SITE- P3 MANTLE, SKINLESS

LENGTH	NUM	6	MEAN	0.133	S. D.	0.016	LOW	0.113	HIGH	0.153
WEIGHT	NUM	6	MEAN	0.072	S. D.	0.021	LOW	0.040	HIGH	0.100

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0004	0006	0005	0006	0006	0006	0006	0006	0006
N DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0005	0000	0001	0000
MEAN	0.130	0.454	0.174	4.653	0.405	0.064	0.283	3.921	11.19	0.228	0.205	0.310	0.326	0.649	0.936
S. D.	0.000	0.142	0.224	2.682	0.124	0.018	0.353	3.043	2.78	0.078	0.064	0.000	0.100	0.283	0.454
LOW	0.000	0.310	0.060	1.540	0.250	0.040	0.060	0.400	6.69	0.130	0.160	0.000	0.205	0.440	0.500
HIGH	0.130	0.690	0.630	9.000	0.560	0.080	0.810	9.190	14.06	0.355	0.250	0.310	0.490	1.130	1.700

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SQUID, ATL. LONGFINNED   LOLIGO PEALII   188003   AREA- NORTH ATLANTIC   SITE- S1   MANTLE, SKINL

LENGTH NUM 2 MEAN 0.137 S. D. 0.070 LOW 0.087 HIGH 0.186
WEIGHT NUM 2 MEAN 0.071 S. D. 0.062 LOW 0.027 HIGH 0.114

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.000	0.405	0.290	0.785	0.320	0.075	0.350	6.845	12.87	0.370	0.000	0.000	0.245	0.630	0.910
S. D.	0.000	0.134	0.071	0.474	0.269	0.049	0.311	5.607	3.87	0.057	0.000	0.000	0.021	0.000	0.311
LOW	0.000	0.310	0.240	0.450	0.130	0.040	0.130	2.880	10.13	0.330	0.000	0.000	0.230	0.000	0.690
HIGH	0.000	0.500	0.340	1.120	0.510	0.110	0.570	10.810	15.60	0.410	0.000	0.000	0.260	0.630	1.130

SQUID, ATL. LONGFINNED   LOLIGO PEALII   188003   AREA- NORTH ATLANTIC   SITE- S6   MANTLE, SKINLE

LENGTH NUM 4 MEAN 0.155 S. D. 0.024 LOW 0.128 HIGH 0.184
WEIGHT NUM 4 MEAN 0.108 S. D. 0.035 LOW 0.070 HIGH 0.152

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0001	0000
MEAN	0.040	0.486	0.198	3.231	0.586	0.050	0.148	3.096	14.37	0.381	0.190	0.325	0.254	0.882	0.550
S. D.	0.000	0.235	0.176	1.806	0.108	0.014	0.021	1.802	3.21	0.135	0.000	0.191	0.093	0.316	0.164
LOW	0.000	0.190	0.090	1.600	0.445	0.030	0.130	1.535	11.09	0.275	0.000	0.190	0.180	0.595	0.380
HIGH	0.040	0.750	0.460	5.000	0.700	0.060	0.170	5.560	18.25	0.560	0.190	0.460	0.390	1.220	0.690

SQUID, PAC.   LOLIGO OPALESCENS   188006   AREA- CALIFORNIA   SITE- F8   WHOLE

LENGTH NUM 10 MEAN 0.148 S. D. 0.004 LOW 0.143 HIGH 0.156
WEIGHT NUM 9 MEAN 0.077 S. D. 0.008 LOW 0.070 HIGH 0.091

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0006	0001	0000	0000	0000	0000	0001	0000	0000	0002	0009	0006	0000	0001	0000
MEAN	0.038	0.597	0.427	2.071	0.580	0.124	0.162	30.551	16.45	0.382	0.700	0.230	0.417	0.928	0.919
S. D.	0.021	0.263	0.090	1.121	0.221	0.135	0.087	5.843	2.99	0.161	0.000	0.115	0.146	0.645	0.248
LOW	0.010	0.300	0.215	0.558	0.240	0.030	0.045	21.780	11.93	0.285	0.000	0.150	0.210	0.130	0.475
HIGH	0.060	1.130	0.515	3.450	0.945	0.500	0.250	39.310	20.71	0.770	0.700	0.400	0.695	1.900	1.250

SQUID, PAC.   LOLIGO OPALESCENS   188006   AREA- CALIFORNIA   SITE- I8   WHOLE

LENGTH NUM 30 MEAN 0.162 S. D. 0.020 LOW 0.135 HIGH 0.180
WEIGHT NUM 20 MEAN 0.058 S. D. 0.016 LOW 0.042 HIGH 0.073

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0029	0030	0030	0030	0030	0030	0030	0030	0030	0030	0030	0030	0030	0030	0030
N DET.	0019	0000	0000	0000	0000	0000	0001	0000	0000	0000	0015	0024	0000	0001	0000
MEAN	0.064	0.749	0.766	3.265	0.566	0.062	0.193	25.390	21.27	0.212	0.282	0.263	0.433	0.616	0.654
S. D.	0.066	0.425	0.274	2.099	0.201	0.029	0.278	11.555	10.51	0.047	0.204	0.190	0.113	0.187	0.223
LOW	0.020	0.375	0.210	0.925	0.110	0.030	0.010	10.880	8.75	0.140	0.060	0.130	0.260	0.340	0.380
HIGH	0.240	2.310	1.250	10.100	0.950	0.180	1.560	53.130	66.87	0.350	0.880	0.630	0.730	0.985	1.630

SQUID, PAC.   LOLIGO OPALESCENS   188006   AREA- CALIFORNIA   SITE- K3   WHOLE

LENGTH NUM 10 MEAN 0.170 S. D. 0.000 LOW 0.170 HIGH 0.170
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0005	0000	0000	0000
MEAN	0.036	0.486	1.223	2.612	0.539	0.104	0.171	37.198	11.86	0.176	0.197	0.276	0.313	0.638	0.514
S. D.	0.014	0.213	0.452	0.732	0.130	0.043	0.109	14.254	3.97	0.025	0.166	0.102	0.153	0.205	0.219
LOW	0.020	0.190	0.410	1.225	0.290	0.050	0.060	9.630	3.44	0.135	0.060	0.190	0.140	0.380	0.170
HIGH	0.050	0.940	1.720	4.166	0.710	0.185	0.310	53.125	16.67	0.215	0.500	0.440	0.680	0.965	0.895

SQUID, SHORTFINNED   ILLEX ILLECEBROSUS   188014   AREA- NORTH ATLANTIC   SITE- I5   MANTLE, SKINLESS

LENGTH NUM 10 MEAN 0.242 S. D. 0.020 LOW 0.211 HIGH 0.275
WEIGHT NUM 10 MEAN 0.363 S. D. 0.080 LOW 0.244 HIGH 0.492

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0006	0000	0000	0000	0000	0000	0002	0000	0000	0000	0010	0008	0000	0005	0000
MEAN	0.073	0.453	0.106	1.549	0.407	0.046	0.252	3.078	10.87	0.225	0.000	0.130	0.333	0.788	0.931
S. D.	0.055	0.248	0.038	0.945	0.271	0.018	0.259	0.939	2.18	0.068	0.000	0.000	0.207	0.341	0.348
LOW	0.020	0.250	0.065	0.450	0.220	0.010	0.050	1.920	7.19	0.130	0.000	0.130	0.160	0.440	0.530
HIGH	0.120	1.000	0.180	3.730	1.130	0.080	0.690	4.380	13.94	0.330	0.000	0.130	0.810	1.250	1.440

SQUID, SHORTFINNED   ILLEX ILLECEBROSUS   188014   AREA- NORTH ATLANTIC   SITE- I9   MANTLE, SKINLESS

LENGTH NUM 20 MEAN 0.226 S. D. 0.034 LOW 0.179 HIGH 0.288
WEIGHT NUM 20 MEAN 0.287 S. D. 0.138 LOW 0.140 HIGH 0.558

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0005	0000	0000	0000	0000	0000	0001	0000	0000	0000	0015	0011	0000	0020	0000
MEAN	0.069	0.726	0.143	2.238	0.514	0.046	0.372	5.421	13.41	0.260	0.126	0.192	0.299	0.000	0.548
S. D.	0.037	0.412	0.048	1.176	0.190	0.017	0.387	2.596	1.20	0.045	0.035	0.055	0.049	0.000	0.114
LOW	0.020	0.310	0.070	0.575	0.130	0.020	0.120	0.460	11.06	0.200	0.090	0.130	0.230	0.000	0.330
HIGH	0.150	1.810	0.240	4.500	0.985	0.080	1.815	9.500	15.91	0.360	0.160	0.310	0.390	0.000	0.750

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

SQUID, SHORTFINNED ILLEX ILLECEBROSUS 188014 AREA- NORTH ATLANTIC SITE- J7 MANTLE, SKINLESS

LENGTH	NUM	1	MEAN	0.192	S. D.	0.000	LOW	0.192	HIGH	0.192
WEIGHT	NUM	1	MEAN	0.140	S. D.	0.000	LOW	0.140	HIGH	0.140

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	0.020	0.500	0.160	2.150	0.550	0.090	0.250	12.380	16.13	0.340	0.140	0.000	0.300	0.000	0.630
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.500	0.160	2.150	0.550	0.090	0.250	12.380	16.13	0.340	0.140	0.000	0.300	0.000	0.630

SQUID, SHORTFINNED ILLEX ILLECEBROSUS 188014 AREA- NORTH ATLANTIC SITE- J8 MANTLE, SKINLESS

LENGTH	NUM	5	MEAN	0.145	S. D.	0.015	LOW	0.121	HIGH	0.159
WEIGHT	NUM	5	MEAN	0.068	S. D.	0.015	LOW	0.047	HIGH	0.086

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0001	0000	0001	0000
MEAN	0.020	0.452	0.486	3.579	0.710	0.050	0.162	3.702	14.04	0.526	0.145	0.508	0.298	0.715	0.758
S. D.	0.000	0.212	0.286	2.339	0.385	0.007	0.036	2.146	2.81	0.165	0.021	0.185	0.070	0.222	0.225
LOW	0.000	0.250	0.080	0.470	0.120	0.040	0.130	0.630	10.06	0.310	0.130	0.310	0.210	0.500	0.440
HIGH	0.020	0.810	0.880	6.950	1.110	0.060	0.210	6.250	17.94	0.690	0.160	0.750	0.400	0.970	1.000

SQUID, SHORTFINNED ILLEX ILLECEBROSUS 188014 AREA- NORTH ATLANTIC SITE- J9 MANTLE, SKINLESS

LENGTH	NUM	4	MEAN	0.196	S. D.	0.012	LOW	0.179	HIGH	0.205
WEIGHT	NUM	4	MEAN	0.164	S. D.	0.024	LOW	0.129	HIGH	0.183

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0004	0000	0000	0000
MEAN	0.040	0.488	0.190	3.391	0.729	0.053	0.265	6.676	14.72	0.413	0.300	0.000	0.251	1.020	0.598
S. D.	0.000	0.093	0.047	1.116	0.188	0.017	0.212	2.664	0.86	0.112	0.113	0.000	0.045	0.206	0.209
LOW	0.000	0.380	0.140	2.550	0.580	0.030	0.060	2.885	13.75	0.280	0.220	0.000	0.200	0.830	0.440
HIGH	0.040	0.570	0.250	5.000	1.000	0.070	0.560	9.130	15.75	0.520	0.380	0.000	0.310	1.310	0.880

SQUID, SHORTFINNED ILLEX ILLECEBROSUS 188014 AREA- NORTH ATLANTIC SITE- N2 MANTLE, SKINLESS

LENGTH	NUM	2	MEAN	0.083	S. D.	0.004	LOW	0.080	HIGH	0.086
WEIGHT	NUM	2	MEAN	0.021	S. D.	0.002	LOW	0.019	HIGH	0.022

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0001	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0001	0000	0000	0000
MEAN	0.120	0.755	0.150	0.925	0.320	0.045	0.160	3.245	13.85	0.160	0.000	0.190	0.430	0.755	0.640
S. D.	0.000	0.431	0.057	0.000	0.000	0.007	0.042	1.336	0.76	0.014	0.000	0.000	0.042	0.177	0.000
LOW	0.000	0.450	0.110	0.000	0.000	0.040	0.130	2.300	13.31	0.150	0.000	0.000	0.400	0.630	0.000
HIGH	0.120	1.060	0.190	0.925	0.320	0.050	0.190	4.190	14.38	0.170	0.000	0.190	0.460	0.880	0.640

SQUID, SHORTFINNED ILLEX ILLECEBROSUS 188014 AREA- NORTH ATLANTIC SITE- N3 MANTLE, SKINLESS

LENGTH	NUM	4	MEAN	0.165	S. D.	0.034	LOW	0.131	HIGH	0.211
WEIGHT	NUM	4	MEAN	0.082	S. D.	0.037	LOW	0.052	HIGH	0.127

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0003
N DET.	0002	0000	0000	0000	0000	0000	0001	0000	0000	0000	0004	0004	0000	0000	0000
MEAN	0.135	0.516	0.179	3.831	0.533	0.050	0.092	4.395	13.19	0.246	0.000	0.000	0.345	0.908	0.678
S. D.	0.120	0.128	0.044	1.970	0.206	0.008	0.055	2.111	1.33	0.071	0.000	0.000	0.204	0.252	0.063
LOW	0.050	0.330	0.120	1.750	0.260	0.040	0.060	2.600	11.31	0.190	0.000	0.000	0.220	0.690	0.630
HIGH	0.220	0.620	0.225	6.250	0.740	0.060	0.155	7.440	14.38	0.350	0.000	0.000	0.650	1.250	0.750

SQUID, SHORTFINNED ILLEX ILLECEBROSUS 188014 AREA- NORTH ATLANTIC SITE- O1 MANTLE, SKINLESS

LENGTH	NUM	5	MEAN	0.130	S. D.	0.042	LOW	0.089	HIGH	0.194
WEIGHT	NUM	5	MEAN	0.072	S. D.	0.054	LOW	0.031	HIGH	0.164

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
UMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0004	0000	0005	0000
MEAN	0.030	0.501	0.178	1.391	0.634	0.059	0.159	2.490	14.98	0.360	0.153	0.220	0.282	0.000	0.614
S. D.	0.014	0.147	0.070	1.076	0.499	0.016	0.030	1.279	1.44	0.058	0.083	0.000	0.036	0.000	0.114
LOW	0.020	0.370	0.130	0.380	0.230	0.040	0.130	0.590	13.25	0.280	0.060	0.000	0.220	0.000	0.470
IGH	0.040	0.685	0.300	2.950	1.480	0.080	0.190	4.190	16.25	0.430	0.220	0.220	0.310	0.000	0.750

SQUID, SHORTFINNED ILLEX ILLECEBROSUS 188014 AREA- NORTH ATLANTIC SITE- O2 MANTLE, SKINLESS

LENGTH	NUM	9	MEAN	0.240	S. D.	0.010	LOW	0.231	HIGH	0.263
WEIGHT	NUM	9	MEAN	0.064	S. D.	0.021	LOW	0.053	HIGH	0.119

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0008	0008	0009	0009	0009	0009	0009	0009	0009	0009	0009	0008
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0007	0006	0000	0001	0000
MEAN	0.112	0.579	0.248	3.298	0.593	0.092	0.128	9.308	14.54	0.364	0.255	0.300	0.278	1.201	0.801
S. D.	0.152	0.293	0.058	1.164	0.150	0.039	0.060	2.899	3.15	0.183	0.134	0.205	0.074	0.479	0.257
OW	0.020	0.200	0.175	1.800	0.330	0.040	0.055	5.910	8.93	0.200	0.160	0.090	0.160	0.300	0.565
IGH	0.400	1.190	0.340	4.750	0.750	0.155	0.240	13.790	18.75	0.680	0.350	0.500	0.365	1.950	1.370

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                                        TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   MF1
                                        IN RESOURCE SURVEY SPECIES:
LOCATION LEVEL 5                        BY TISSUE AND LOCATION


 SQUID, SHORTFINNED               ILLEX ILLECEBROSUS                    188014   AREA- NORTH ATLANTIC      SITE- P2   MANTLE, SKINLE

LENGTH      NUM   14   MEAN          0.186    S. D.        0.006   LOW        0.173   HIGH          0.196
WEIGHT      NUM   14   MEAN          0.143    S. D.        0.013   LOW        0.124   HIGH          0.166
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0014    0013    0014    0014    0014    0014    0013     0014    0014    0014      0014    0014    0014    0014     0014
N DET.      0008    0000    0000    0000    0000    0000    0000     0000    0000    0000      0013    0011    0000    0007     0000
MEAN       0.060   0.487   0.093   2.790   0.491   0.054   0.122    4.895   13.57   0.287     0.140   0.243   0.283   0.731    0.725
S. D.      0.040   0.219   0.026   1.632   0.229   0.010   0.042    1.623    2.15   0.084     0.000   0.196   0.144   0.206    0.244
LOW        0.020   0.150   0.040   1.080   0.190   0.040   0.060    1.880    8.63   0.120     0.000   0.130   0.160   0.530    0.440
HIGH       0.130   0.970   0.135   6.810   1.085   0.070   0.190    7.780   17.81   0.390     0.140   0.470   0.740   1.140    1.310


 SQUID, SHORTFINNED               ILLEX ILLECEBROSUS                    188014   AREA- NORTH ATLANTIC      SITE- S1   MANTLE, SKINLE

LENGTH      NUM   11   MEAN          0.197    S. D.        0.050   LOW        0.127   HIGH          0.240
WEIGHT      NUM   11   MEAN          0.072    S. D.        0.015   LOW        0.043   HIGH          0.083
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0011    0011    0011    0011    0011    0011    0011     0011    0011    0011      0011    0011    0011    0010     0011
N DET.      0006    0000    0000    0000    0000    0000    0000     0000    0000    0000      0006    0004    0000    0001     0000
MEAN       0.105   0.977   0.291   4.200   0.868   0.122   0.415    8.315   14.76   0.297     0.157   0.403   0.619   1.148    1.473
S. D.      0.134   0.516   0.086   2.207   0.295   0.084   0.634    5.138    2.57   0.084     0.033   0.211   0.360   0.451    2.118
LOW        0.025   0.140   0.160   1.362   0.480   0.030   0.110    3.190   11.44   0.130     0.115   0.150   0.195   0.500    0.440
HIGH       0.340   1.950   0.420   8.900   1.600   0.250   2.310   18.060   20.00   0.405     0.190   0.630   1.230   1.750    7.810


 SQUID, SHORTFINNED               ILLEX ILLECEBROSUS                    188014   AREA- NORTH ATLANTIC      SITE- S4   MANTLE, SKINLES

LENGTH      NUM    2   MEAN          0.178    S. D.        0.029   LOW        0.157   HIGH          0.198
WEIGHT      NUM    2   MEAN          0.129    S. D.        0.048   LOW        0.095   HIGH          0.163
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0002    0002    0002    0002    0002    0002    0002     0002    0002    0002      0002    0002    0002    0002     0002
N DET.      0002    0000    0000    0000    0000    0000    0000     0000    0000    0000      0001    0002    0000    0000     0000
MEAN       0.000   0.500   0.095   6.788   0.690   0.050   0.095    4.445   13.44   0.230     0.310   0.000   0.225   1.115    0.535
S. D.      0.000   0.085   0.007   6.311   0.580   0.014   0.049    0.615    3.10   0.071     0.000   0.000   0.021   0.007    0.134
LOW        0.000   0.440   0.090   2.325   0.280   0.040   0.060    4.010   11.25   0.180     0.000   0.000   0.210   1.110    0.440
HIGH       0.000   0.560   0.100  11.250   1.100   0.060   0.130    4.880   15.63   0.280     0.310   0.000   0.240   1.120    0.630


 SQUID, SHORTFINNED               ILLEX ILLECEBROSUS                    188014   AREA- NORTH ATLANTIC      SITE- S7   MANTLE, SKINLES

LENGTH      NUM    5   MEAN          0.185    S. D.        0.015   LOW        0.163   HIGH          0.200
WEIGHT      NUM    5   MEAN          0.134    S. D.        0.025   LOW        0.102   HIGH          0.163
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0005    0005    0005    0005    0005    0005    0005     0005    0005    0005      0005    0005    0005    0005     0005
N DET.      0004    0000    0000    0000    0000    0000    0000     0000    0000    0000      0005    0004    0000    0001     0000
MEAN       0.060   0.683   0.289   6.230   0.592   0.062   0.160    4.896   14.19   0.304     0.000   0.190   0.231   0.973    0.643
S. D.      0.000   0.184   0.352   2.329   0.120   0.034   0.052    6.644    6.02   0.077     0.000   0.000   0.069   0.236    0.121
LOW        0.000   0.405   0.080   3.250   0.430   0.030   0.130    0.440    5.63   0.230     0.000   0.000   0.150   0.630    0.440
HIGH       0.060   0.880   0.915   9.450   0.730   0.120   0.250   16.410   22.53   0.410     0.000   0.190   0.310   1.130    0.750


 OYSTER, EASTERN                  CRASSOSTREA VIRGINICA                 189001   AREA- NORTH ATLANTIC      SITE- H8   SHUCKED

LENGTH      NUM    0   MEAN          0.000    S. D.        0.000   LOW        0.000   HIGH          0.000
WEIGHT      NUM    0   MEAN          0.000    S. D.        0.000   LOW        0.000   HIGH          0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0020    0019    0018    0019    0019    0019    0018     0018    0018    0018      0019    0019    0017    0019     0019
N DET.      0009    0000    0000    0001    0001    0000    0000     0000    0000    0000      0010    0008    0000    0001     0000
MEAN       0.048   1.348   3.195   2.927   0.251   0.743   0.756  160.552  833.83   0.843     0.333   0.621   5.486   1.157    0.720
S. D.      0.035   1.059   1.475   1.665   0.131   0.672   0.584  120.409  305.76   0.775     0.147   0.435   4.602   0.977    0.438
LOW        0.020   0.230   1.440   0.855   0.120   0.030   0.120   22.190  492.86   0.160     0.180   0.250   0.800   0.250    0.285
HIGH       0.120   3.635   5.680   6.920   0.570   1.805   2.173  336.935 1574.10   2.530     0.680   1.595  14.640   2.970    1.765


 OYSTER, EASTERN                  CRASSOSTREA VIRGINICA                 189001   AREA- NORTH ATLANTIC      SITE- M8   SHUCKED, SELECT

LENGTH      NUM    0   MEAN          0.000    S. D.        0.000   LOW        0.000   HIGH          0.000
WEIGHT      NUM    0   MEAN          0.000    S. D.        0.000   LOW        0.000   HIGH          0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0010    0010    0010    0010    0008    0010    0010     0010    0010    0010      0010    0010    0010    0010     0010
N DET.      0008    0000    0000    0001    0000    0001    0000     0000    0000    0000      0006    0004    0000    0001     0000
MEAN       0.040   0.266   0.500   2.153   0.413   0.089   0.139    9.660  313.34   0.307     0.140   0.438   1.199   0.470    0.579
S. D.      0.000   0.140   0.149   1.008   0.203   0.069   0.110    3.880  149.58   0.068     0.063   0.428   0.454   0.465    0.343
LOW        0.040   0.130   0.270   1.025   0.155   0.010   0.040    0.470    4.69   0.190     0.060   0.060   0.190   0.060    0.200
HIGH       0.040   0.560   0.680   3.766   0.675   0.245   0.375   14.060  437.50   0.430     0.190   1.220   1.780   1.560    1.170


 OYSTER, EASTERN                  CRASSOSTREA VIRGINICA                 189001   AREA- NORTH ATLANTIC      SITE- M8   SHUCKED, STANDA

LENGTH      NUM    0   MEAN          0.000    S. D.        0.000   LOW        0.000   HIGH          0.000
WEIGHT      NUM    0   MEAN          0.000    S. D.        0.000   LOW        0.000   HIGH          0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
            PPM      PPM    PPM     PPM     PPM     PPM      PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM      PPM

NUMBER      0010    0010    0010    0009    0009    0010    0010     0010    0010    0010      0010    0010    0010    0010     0010
N DET.      0007    0000    0000    0000    0000    0000    0001     0000    0000    0000      0006    0006    0000    0001     0000
MEAN       0.057   0.300   0.964   2.238   0.716   0.219   0.169   18.599  408.66   0.259     0.125   0.185   1.104   0.340    0.366
S. D.      0.038   0.109   0.169   0.839   0.295   0.168   0.168    5.778  250.55   0.057     0.123   0.087   0.230   0.221    0.192
LOW        0.030   0.190   0.795   0.650   0.140   0.030   0.050   14.500   14.56   0.170     0.060   0.090   0.840   0.060    0.130
HIGH       0.100   0.500   1.370   3.250   0.980   0.610   0.560   33.750  828.13   0.320     0.310   0.300   1.480   0.690    0.750
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

OYSTER, EASTERN CRASSOSTREA VIRGINICA 189001 AREA- NORTH ATLANTIC SITE- R3 SHUCKED, SELECT

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 0.015 S. D. 0.000 LOW 0.015 HIGH 0.015

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016
N DET.	0009	0000	0000	0000	0000	0000	0001	0000	0000	0000	0008	0008	0000	0000	0000
MEAN	0.029	0.362	0.640	2.042	0.552	0.160	0.118	14.030	424.17	0.283	0.211	0.230	0.852	0.374	0.349
S. D.	0.019	0.157	0.155	0.841	0.327	0.122	0.093	5.300	205.98	0.043	0.135	0.138	0.211	0.224	0.138
LOW	0.020	0.130	0.330	0.700	0.270	0.010	0.010	0.985	42.19	0.190	0.060	0.060	0.575	0.060	0.060
HIGH	0.070	0.560	0.890	3.441	1.655	0.430	0.380	20.810	729.69	0.350	0.500	0.500	1.220	0.940	0.670

OYSTER, EASTERN CRASSOSTREA VIRGINICA 189001 AREA- NORTH ATLANTIC SITE- R3 SHUCKED, STANDARD

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 7 MEAN 0.010 S. D. 0.000 LOW 0.010 HIGH 0.010

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0016	0015	0016	0016	0015	0016	0016	0016	0016	0016	0016	0016	0016	0016	0016
N DET.	0016	0001	0000	0000	0000	0000	0004	0000	0000	0000	0009	0009	0000	0000	0000
MEAN	0.000	0.404	0.790	1.915	0.615	0.283	0.160	19.666	580.63	0.331	0.172	0.313	1.011	0.411	0.375
S. D.	0.000	0.139	0.103	0.749	0.303	0.215	0.198	4.245	120.76	0.052	0.089	0.157	0.218	0.236	0.190
LOW	0.000	0.190	0.600	0.950	0.280	0.020	0.060	12.200	314.08	0.250	0.060	0.090	0.490	0.130	0.060
HIGH	0.000	0.690	0.980	3.625	1.330	0.690	0.750	27.190	781.25	0.425	0.310	0.620	1.330	0.875	0.870

OYSTER, EASTERN CRASSOSTREA VIRGINICA 189001 AREA- SOUTH ATLANTIC SITE- B5 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0003	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0002	0000
MEAN	0.133	0.689	0.504	11.709	0.625	0.378	0.437	8.365	179.38	0.837	2.571	1.734	3.735	1.389	0.833
S. D.	0.154	0.290	0.151	8.275	0.219	0.088	0.201	2.421	48.45	0.374	1.230	1.123	1.448	0.705	0.511
LOW	0.020	0.363	0.315	4.740	0.240	0.255	0.120	4.895	98.13	0.385	1.500	0.820	2.145	0.650	0.450
HIGH	0.450	1.180	0.820	31.500	0.840	0.540	0.880	12.000	285.00	1.500	5.500	4.380	6.680	2.580	1.975

OYSTER, EASTERN CRASSOSTREA VIRGINICA 189001 AREA- SOUTH ATLANTIC SITE- C2 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0000
MEAN	0.063	1.006	0.983	3.649	0.618	0.592	0.490	24.227	439.65	0.813	0.482	0.950	6.713	0.987	0.643
S. D.	0.042	0.175	0.150	1.108	0.161	0.188	0.113	5.316	77.93	0.307	0.132	0.514	2.028	0.608	0.286
LOW	0.020	0.655	0.710	2.400	0.445	0.250	0.325	19.315	302.00	0.180	0.225	0.165	3.570	0.250	0.340
HIGH	0.130	1.203	1.210	5.770	0.890	0.895	0.625	36.900	571.43	1.280	0.600	1.800	9.500	1.900	1.300

OYSTER, EASTERN CRASSOSTREA VIRGINICA 189001 AREA- SOUTH ATLANTIC SITE- F3 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0003	0000	0002	0000
MEAN	0.030	0.404	0.404	3.579	0.663	0.242	0.205	11.533	266.39	0.282	0.355	0.536	2.868	0.526	0.400
S. D.	0.029	0.263	0.094	2.259	0.403	0.194	0.142	3.847	59.45	0.142	0.285	0.261	0.789	0.170	0.149
LOW	0.010	0.060	0.260	1.440	0.270	0.020	0.050	6.690	142.50	0.190	0.130	0.235	1.990	0.250	0.090
HIGH	0.080	0.950	0.570	9.250	1.725	0.695	0.515	17.145	388.44	0.640	0.870	0.965	4.285	0.690	0.560

OYSTER, EASTERN CRASSOSTREA VIRGINICA 189001 AREA- GULF SITE- B8 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0003	0001	0000	0000	0000	0000	0001	0000	0000	0000	0000	0000	0000	0002	0000
MEAN	0.039	1.383	1.026	4.170	0.684	0.319	0.471	18.964	521.17	1.273	0.259	0.844	18.421	1.831	1.011
S. D.	0.021	0.540	0.365	2.568	0.217	0.174	0.181	6.077	265.32	0.636	0.127	0.699	10.370	1.128	0.636
LOW	0.010	0.557	0.376	0.500	0.250	0.165	0.282	10.330	212.86	0.610	0.070	0.335	9.320	0.360	0.500
HIGH	0.060	2.125	1.630	9.360	0.965	0.710	0.845	29.645	985.07	2.565	0.485	2.750	42.920	3.600	2.250

OYSTER, EASTERN CRASSOSTREA VIRGINICA 189001 AREA- GULF SITE- D6 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0010	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011
N DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0001	0000
MEAN	0.038	0.485	0.436	4.809	1.038	0.240	0.189	13.137	304.02	0.362	0.332	1.587	2.642	0.678	0.456
S. D.	0.015	0.225	0.166	2.318	0.728	0.257	0.124	4.810	138.33	0.129	0.286	0.590	0.801	0.169	0.148
LOW	0.020	0.300	0.180	1.933	0.180	0.040	0.010	5.370	132.50	0.090	0.150	0.925	1.570	0.435	0.275
HIGH	0.055	1.130	0.730	8.483	2.155	0.960	0.470	22.100	645.63	0.540	1.120	2.795	3.945	0.910	0.750

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

REPORT MF1

LOCATION LEVEL 5

OYSTER, EASTERN CRASSOSTREA VIRGINICA 189001 AREA- GULF SITE- E5 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020	0020	0020
N DET.	0012	0000	0000	0000	0000	0000	0001	0000	0000	0001	0006	0003	0000	0001	0000
MEAN	0.028	0.706	0.362	3.183	0.398	0.275	0.278	5.808	205.59	0.492	0.259	0.438	1.771	1.019	0.543
S. D.	0.013	0.357	0.147	1.800	0.184	0.161	0.189	3.962	106.43	0.213	0.154	0.127	0.743	0.541	0.160
LOW	0.010	0.250	0.180	0.400	0.140	0.080	0.060	0.420	11.64	0.260	0.090	0.190	0.730	0.250	0.300
HIGH	0.055	1.590	0.800	7.750	1.000	0.560	0.810	19.070	455.00	1.015	0.625	0.750	3.090	2.645	0.840

OYSTER, EASTERN CRASSOSTREA VIRGINICA 189001 AREA- GULF SITE- E8 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0003	0000	0000	0001	0000	0000	0000	0000	0000	0000	0003	0000	0000	0002	0000
MEAN	0.036	0.436	0.511	2.899	0.653	0.375	0.245	6.559	61.69	0.451	0.115	0.515	4.531	0.751	0.453
S. D.	0.013	0.205	0.172	1.487	0.741	0.106	0.080	2.418	30.93	0.120	0.064	0.311	1.283	0.291	0.217
LOW	0.020	0.030	0.190	1.000	0.150	0.200	0.140	2.430	3.90	0.230	0.060	0.060	2.690	0.180	0.080
HIGH	0.050	0.750	0.860	4.750	2.650	0.500	0.360	9.410	107.14	0.613	0.226	0.910	6.175	1.130	0.775

OYSTER, PAC. (GIANT) CRASSOSTREA GIGAS 189002 AREA- CALIFORNIA SITE- B5 SHUCKED

LENGTH NUM 10 MEAN 0.150 S. D. 0.000 LOW 0.150 HIGH 0.150
WEIGHT NUM 10 MEAN 0.262 S. D. 0.000 LOW 0.262 HIGH 0.262

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0020	0020	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020
N DET.	0012	0001	0001	0000	0000	0000	0001	0000	0000	0001	0008	0003	0000	0004	0000
MEAN	0.111	0.702	0.719	4.458	0.798	0.297	0.414	18.559	119.71	0.501	0.253	0.393	10.150	1.079	0.805
S. D.	0.101	0.308	0.091	2.267	0.660	0.272	0.306	5.278	31.97	0.242	0.179	0.252	3.698	0.466	0.257
LOW	0.010	0.190	0.545	1.325	0.280	0.020	0.110	3.060	48.12	0.260	0.060	0.060	4.380	0.440	0.450
HIGH	0.260	1.370	0.910	8.750	3.390	0.895	1.380	25.630	175.00	1.430	0.720	1.130	17.040	2.050	1.500

OYSTER, PAC. (GIANT) CRASSOSTREA GIGAS 189002 AREA- CALIFORNIA SITE- F1 SHUCKED

LENGTH NUM 10 MEAN 0.106 S. D. 0.000 LOW 0.106 HIGH 0.106
WEIGHT NUM 10 MEAN 0.138 S. D. 0.000 LOW 0.138 HIGH 0.138

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0008	0002	0000	0000	0000	0001	0001	0000	0000	0002	0006	0004	0000	0002	0000
MEAN	0.090	0.613	0.640	4.071	1.006	0.101	0.333	2.580	105.04	0.423	0.293	0.438	6.212	1.151	0.720
S. D.	0.014	0.274	0.116	1.995	0.612	0.125	0.152	0.598	64.36	0.340	0.301	0.341	2.354	0.546	0.320
LOW	0.080	0.250	0.460	0.875	0.440	0.030	0.140	1.790	50.48	0.110	0.050	0.180	2.810	0.500	0.450
HIGH	0.100	1.130	0.860	6.535	2.610	0.430	0.650	3.750	274.38	1.110	0.720	1.090	10.000	2.280	1.310

OYSTER, PAC. (GIANT) CRASSOSTREA GIGAS 189002 AREA- PACIFIC NORTHWEST SITE- H4 SHUCKED, SMALL

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010
N DET.	0005	0000	0000	0000	0000	0001	0000	0000	0000	0001	0002	0004	0000	0003	0000
MEAN	0.050	0.701	1.584	3.379	0.816	0.435	0.252	14.372	461.30	0.398	0.261	0.304	7.233	0.966	0.766
S. D.	0.053	0.216	0.446	1.715	0.388	0.156	0.129	2.554	302.47	0.188	0.184	0.160	0.951	0.247	0.276
LOW	0.010	0.355	0.735	1.200	0.340	0.180	0.070	10.250	11.82	0.190	0.100	0.120	5.640	0.535	0.500
HIGH	0.140	1.070	2.290	5.940	1.575	0.745	0.440	18.610	893.75	0.710	0.655	0.535	8.395	1.250	1.375

OYSTER, PAC. (GIANT) CRASSOSTREA GIGAS 189002 AREA- PACIFIC NORTHWEST SITE- M6 SHUCKED, MEDIUM

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0004	0001	0000	0000	0000	0000	0000	0000	0000	0000	0004	0002	0000	0001	0000
MEAN	0.060	0.516	1.065	2.762	0.678	0.155	0.152	13.516	112.95	0.269	0.210	0.354	4.943	0.556	0.457
S. D.	0.085	0.292	0.135	1.107	0.824	0.144	0.087	3.234	48.21	0.189	0.269	0.190	1.143	0.198	0.158
LOW	0.010	0.250	0.765	0.400	0.110	0.060	0.065	6.755	54.10	0.130	0.060	0.160	2.815	0.250	0.235
HIGH	0.210	1.060	1.235	4.025	2.960	0.430	0.360	17.810	175.00	0.710	0.750	0.750	6.430	0.970	0.750

OYSTER, PAC. (GIANT) CRASSOSTREA GIGAS 189002 AREA- PACIFIC NORTHWEST SITE- M9 SHUCKED, MEDIUM

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010
N DET.	0006	0001	0000	0001	0000	0000	0001	0000	0000	0000	0006	0003	0000	0002	0000
MEAN	0.028	0.444	0.703	3.412	0.800	0.177	0.254	12.206	77.44	0.294	0.325	0.389	9.235	0.841	0.618
S. D.	0.021	0.223	0.161	2.796	0.274	0.160	0.144	2.251	22.46	0.114	0.530	0.148	3.817	0.525	0.263
LOW	0.010	0.230	0.360	1.125	0.270	0.010	0.080	8.130	43.30	0.150	0.050	0.235	0.200	0.060	0.310
HIGH	0.050	0.880	0.970	10.150	1.170	0.460	0.500	15.870	112.41	0.455	1.120	0.665	13.210	1.700	1.000

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

OYSTER, PAC. (GIANT) CRASSOSTREA GIGAS 189002 AREA- PACIFIC NORTHWEST SITE- N1 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0004	0001	0000	0000	0000	0000	0000	0000	0000	0001	0003	0001	0000	0003	0000
MEAN	0.038	0.669	2.812	5.174	0.541	0.524	0.295	21.822	228.60	0.365	0.319	0.574	6.715	0.711	1.197
S. D.	0.036	0.212	0.528	2.432	0.144	0.264	0.130	4.444	54.30	0.100	0.286	0.376	1.577	0.359	0.679
LOW	0.020	0.396	2.090	1.950	0.355	0.070	0.110	15.610	180.35	0.250	0.050	0.275	4.675	0.320	0.550
HIGH	0.110	1.075	3.885	9.000	0.845	0.820	0.500	27.815	340.36	0.575	0.730	1.500	9.070	1.250	2.500

SCALLOP, SEA (SMOOTH) PLACOPECTEN MAGELLANICUS 190013 AREA- NORTH ATLANTIC SITE- N7 ADDUCTOR MUSCLE

LENGTH NUM 1 MEAN 0.080 S. D. 0.000 LOW 0.080 HIGH 0.080
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
MEAN	0.050	0.560	9.750	3.300	0.980	0.350	0.200	1.130	17.19	0.390	15.630	1.250	0.880	0.380	0.590
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.050	0.560	9.750	3.300	0.980	0.350	0.200	1.130	17.19	0.390	15.630	1.250	0.880	0.380	0.590

SCALLOP, SEA (SMOOTH) PLACOPECTEN MAGELLANICUS 190013 AREA- NORTH ATLANTIC SITE- R3 ADDUCTOR MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0009	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0007	0000	0000	0000	0000	0000	0001	0000	0000	0000	0006	0010	0000	0000	0000
MEAN	0.047	0.412	0.116	3.796	0.238	0.032	0.398	0.161	12.80	0.212	0.203	0.000	0.216	0.613	0.481
S. D.	0.025	0.211	0.022	1.613	0.150	0.010	0.414	0.085	2.32	0.043	0.062	0.000	0.045	0.208	0.112
LOW	0.020	0.190	0.080	2.000	0.050	0.010	0.110	0.060	8.69	0.150	0.120	0.000	0.140	0.310	0.345
HIGH	0.070	0.880	0.140	6.650	0.510	0.045	1.125	0.330	15.62	0.290	0.250	0.000	0.270	1.000	0.630

SCALLOP, ATL. BAY AEQUIPECTEN IRRADIANS 190014 AREA- SOUTH ATLANTIC SITE- C1 ADDUCTOR MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0002	0000	0000	0000	0000	0000	0001	0000	0000	0000	0001	0009	0000	0003	0000
MEAN	0.091	0.380	0.133	2.577	0.291	0.082	0.393	0.380	14.47	0.297	0.264	0.310	4.003	0.677	0.711
S. D.	0.071	0.171	0.029	1.289	0.180	0.093	0.376	0.130	2.95	0.121	0.093	0.000	1.714	0.357	0.212
LOW	0.030	0.130	0.110	0.900	0.050	0.030	0.110	0.195	8.44	0.120	0.130	0.000	0.930	0.380	0.440
HIGH	0.220	0.630	0.190	4.916	0.660	0.345	1.190	0.560	18.75	0.500	0.440	0.310	6.380	1.440	1.130

SCALLOP, ATL. BAY AEQUIPECTEN IRRADIANS 190014 AREA- SOUTH ATLANTIC SITE- C2 ADDUCTOR MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0006	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0003	0000	0000	0000
MEAN	0.034	0.574	0.112	3.067	0.337	0.031	0.178	0.234	9.70	0.255	0.118	0.185	1.608	0.540	0.452
S. D.	0.019	0.365	0.063	1.736	0.190	0.016	0.093	0.076	2.75	0.047	0.047	0.093	2.134	0.213	0.171
LOW	0.020	0.250	0.060	1.100	0.050	0.010	0.040	0.090	5.40	0.170	0.060	0.090	0.310	0.190	0.220
HIGH	0.060	1.440	0.280	5.690	0.700	0.060	0.310	0.360	15.81	0.320	0.190	0.345	7.595	0.855	0.750

SCALLOP, CALICO AEQUIPECTEN GIBBUS 190016 AREA- SOUTH ATLANTIC SITE- C2 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0006	0000	0000	0000	0001	0001	0000	0000	0000	0000	0000	0001	0000	0001	0000
MEAN	0.073	1.024	1.389	8.920	0.395	0.114	0.758	5.460	12.12	1.347	0.403	0.884	3.499	1.456	0.868
S. D.	0.060	0.275	0.176	5.467	0.124	0.043	0.235	2.074	2.54	0.555	0.129	0.238	0.610	0.689	0.279
LOW	0.030	0.710	1.156	3.360	0.210	0.070	0.360	3.286	7.14	0.645	0.200	0.590	2.290	0.360	0.500
HIGH	0.160	1.350	1.680	19.500	0.575	0.215	1.140	9.640	15.36	2.500	0.626	1.366	4.436	2.500	1.310

SCALLOP, CALICO AEQUIPECTEN GIBBUS 190016 AREA- SOUTH ATLANTIC SITE- C2 ADDUCTOR MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0008	0000	0000	0000	0000	0003	0000	0000	0000	0000	0000	0007	0000	0000	0000
MEAN	0.090	0.529	1.631	2.767	0.448	0.022	0.106	0.272	10.97	0.186	1.140	0.273	0.504	0.526	0.448
S. D.	0.057	0.232	0.211	1.148	0.074	0.007	0.053	0.071	0.76	0.029	0.209	0.144	0.076	0.201	0.094
LOW	0.050	0.250	1.180	1.710	0.345	0.010	0.060	0.190	9.50	0.135	0.765	0.190	0.405	0.280	0.330
HIGH	0.130	1.000	1.910	5.810	0.600	0.030	0.195	0.455	12.03	0.220	1.425	0.440	0.620	0.940	0.595

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                                              TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS
                                             IN RESOURCE SURVEY SPECIES:
LOCATION LEVEL 5                             BY TISSUE AND LOCATION


SCALLOP, CALICO                  AEQUIPECTEN GIBBUS                 190016   AREA- SOUTH ATLANTIC      SITE- J1   ADDUCTOR MUSCLE

LENGTH     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
WEIGHT     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
           MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
               PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER        0010     0009     0010     0009     0010     0010     0009     0010     0010     0010     0010     0010     0010     0010     0010
N DET.        0005     0001     0000     0000     0000     0003     0001     0000     0000     0001     0007     0005     0000     0003     0000
MEAN         0.076    0.452    3.278    7.368    0.488    0.091    0.303    0.230    11.85    0.257    0.333    0.506    0.141    0.837    0.588
S. D.        0.081    0.256    0.304    2.002    0.170    0.084    0.185    0.153     1.42    0.148    0.092    0.336    0.078    0.187    0.163
LOW          0.030    0.190    2.975    3.950    0.240    0.020    0.080    0.070     9.63    0.100    0.280    0.090    0.030    0.500    0.400
HIGH         0.220    0.880    3.860   10.600    0.730    0.260    0.630    0.620    14.63    0.570    0.440    1.000    0.290    1.040    0.810


SCALLOP, PINK                    CHLAMYS HERICIUS                   190028   AREA- ALASKA              SITE- L4   ADDUCTOR MUSCLE

LENGTH     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
WEIGHT     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
           MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
               PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER        0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005
N DET.        0004     0000     0000     0000     0000     0000     0000     0000     0000     0000     0005     0005     0000     0005     0000
MEAN         0.020    0.286    0.094    2.350    0.299    0.038    0.314    0.218     8.27    0.250    0.000    0.000    0.114    0.000    0.390
S. D.        0.000    0.036    0.011    1.999    0.057    0.004    0.132    0.008     0.05    0.025    0.000    0.000    0.017    0.000    0.054
LOW          0.000    0.240    0.080    0.250    0.215    0.030    0.190    0.210     8.19    0.210    0.000    0.000    0.090    0.000    0.310
HIGH         0.020    0.330    0.110    5.000    0.355    0.040    0.500    0.230     8.31    0.270    0.000    0.000    0.130    0.000    0.440


CLAM, HARD (QUAHOG)              MERCENARIA MERCENARIA              191001   AREA- NORTH ATLANTIC      SITE- H8   SHUCKED, MIXED

LENGTH     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
WEIGHT     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
           MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
               PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER        0020     0019     0020     0020     0020     0019     0020     0020     0020     0020     0019     0019     0020     0020     0018
N DET.        0005     0001     0000     0000     0000     0000     0000     0000     0000     0000     0003     0001     0000     0004     0000
MEAN         0.065    1.236    0.458    6.645    0.451    0.237    0.825    5.168    27.41    1.049    0.275    0.517   17.111    1.099    0.751
S. D.        0.065    0.354    0.126    2.132    0.157    0.091    0.306    1.467     9.03    0.306    0.117    0.247    7.475    0.323    0.193
LOW          0.020    0.555    0.190    3.325    0.200    0.070    0.080    3.220    18.15    0.580    0.150    0.150    0.180    0.250    0.490
HIGH         0.260    1.940    0.680   11.250    0.800    0.430    1.655    8.460    53.21    1.695    0.630    1.130   30.000    1.440    1.090


CLAM, HARD (QUAHOG)              MERCENARIA MERCENARIA              191001   AREA- NORTH ATLANTIC      SITE- N1   SHUCKED, MIXED

LENGTH     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
WEIGHT     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
           MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
               PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER        0006     0006     0006     0006     0006     0006     0006     0005     0005     0006     0006     0006     0006     0006     0006
N DET.        0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0002     0000     0001     0000
MEAN         0.052    1.275    0.567    5.884    1.286    0.559    0.543    5.537    48.60    1.507    0.434    0.213   50.043    1.113    0.663
S. D.        0.021    0.509    0.133    1.571    0.339    0.261    0.318    0.559    10.84    0.545    0.464    0.109   20.696    0.282    0.219
LOW          0.040    0.680    0.375    4.030    0.775    0.280    0.312    4.610    33.20    0.785    0.140    0.120   28.240    0.710    0.450
HIGH         0.095    2.148    0.715    8.125    1.685    0.860    1.120    6.090    58.93    2.213    1.310    0.350   79.105    1.440    1.060


CLAM, HARD (QUAHOG)              MERCENARIA MERCENARIA              191001   AREA- NORTH ATLANTIC      SITE- R3   SHUCKED, LITTLENE

LENGTH     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
WEIGHT     NUM  16   MEAN      0.052   S. D.     0.016   LOW      0.034   HIGH      0.084
           MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
               PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER        0016     0016     0016     0016     0015     0016     0016     0016     0016     0016     0016     0016     0016     0016     0016
N DET.        0007     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0003     0000     0000     0000
MEAN         0.038    0.562    0.175    2.097    0.494    0.128    0.188    1.446    10.65    0.930    0.384    0.352    1.629    0.979    0.692
S. D.        0.036    0.214    0.034    0.584    0.203    0.037    0.104    0.340     4.11    0.151    0.124    0.165    0.422    0.310    0.166
LOW          0.020    0.210    0.110    1.300    0.120    0.080    0.060    0.870     0.19    0.570    0.160    0.090    1.060    0.410    0.440
HIGH         0.130    0.940    0.240    3.325    0.870    0.220    0.500    2.000    16.31    1.220    0.620    0.620    2.560    1.500    1.095


CLAM, HARD (QUAHOG)              MERCENARIA MERCENARIA              191001   AREA- NORTH ATLANTIC      SITE- R3   SHUCKED, CHERRYST

LENGTH     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
WEIGHT     NUM  30   MEAN      0.160   S. D.     0.021   LOW      0.126   HIGH      0.206
           MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
               PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER        0030     0030     0030     0030     0029     0030     0030     0030     0030     0029     0029     0030     0030     0030     0030
N DET.        0013     0000     0000     0000     0000     0000     0001     0000     0000     0000     0001     0013     0000     0003     0000
MEAN         0.037    0.455    0.181    2.497    0.350    0.148    0.181    1.552    12.15    1.039    0.326    0.356    1.109    0.816    0.562
S. D.        0.024    0.151    0.074    1.013    0.200    0.062    0.114    0.784     2.95    0.265    0.155    0.196    0.515    0.265    0.232
LOW          0.020    0.190    0.040    0.800    0.020    0.030    0.060    0.330     5.25    0.270    0.060    0.075    0.400    0.160    0.220
HIGH         0.100    0.830    0.410    5.300    0.920    0.300    0.500    4.040    18.69    1.390    0.765    0.765    2.380    1.440    1.310


CLAM, HARD (QUAHOG)              MERCENARIA MERCENARIA              191001   AREA- NORTH ATLANTIC      SITE- R3   SHUCKED, CHOWDER

LENGTH     NUM   0   MEAN      0.000   S. D.     0.000   LOW      0.000   HIGH      0.000
WEIGHT     NUM  27   MEAN      0.254   S. D.     0.041   LOW      0.202   HIGH      0.378
           MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
               PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER        0049     0049     0049     0049     0047     0049     0049     0049     0048     0049     0048     0049     0048     0049     0049
N DET.        0014     0000     0000     0000     0000     0000     0002     0000     0000     0000     0009     0009     0000     0017     0000
MEAN         0.050    0.638    0.239    3.340    0.476    0.254    0.245    1.429    10.72    1.062    0.266    0.387    1.682    0.726    0.541
S. D.        0.040    0.248    0.120    1.499    0.245    0.119    0.142    0.555     3.42    0.337    0.128    0.180    1.219    0.251    0.167
LOW          0.020    0.190    0.090    0.900    0.060    0.085    0.060    0.475     3.50    0.190    0.060    0.060    0.100    0.130    0.120
HIGH         0.200    1.285    0.745    7.633    1.030    0.540    0.810    3.440    26.56    1.780    0.530    0.940    5.300    1.310    0.880
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LAM, HARD (QUAHOG)             MERCENARIA MERCENARIA             191001   AREA- SOUTH ATLANTIC      SITE- C2   SHUCKED, CHERRYSTO

NGTH      NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
EIGHT     NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM  SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM      PPM     PPM      PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

MBER      0010    0010    0010    0010    0010     0010    0010     0010   0010     0010     0010    0010    0010    0010     0010
DET.      0005    0000    0000    0000    0000     0000    0000     0000   0000     0000     0002    0002    0000    0000     0000
AN        0.141   0.799   0.199   3.900   0.299    0.204   0.218    0.733  10.66    0.889    0.383   0.399   0.735   1.321    0.686
S. D.     0.103   0.189   0.030   3.137   0.161    0.052   0.044    0.266   2.37    0.296    0.086   0.110   0.292   0.402    0.220
OW        0.030   0.560   0.140   0.600   0.090    0.070   0.190    0.040   6.68    0.180    0.250   0.190   0.130   0.750    0.190
HIGH      0.240   1.060   0.260  10.650   0.560    0.260   0.320    1.020  14.15    1.300    0.535   0.560   1.310   1.880    1.000

LAM, HARD (QUAHOG)             MERCENARIA MERCENARIA             191001   AREA- SOUTH ATLANTIC      SITE- C2   SHUCKED, CHOWDER

LENGTH    NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
EIGHT     NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM  SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM      PPM     PPM      PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

UMBER     0010    0010    0010    0009    0009     0010    0010     0010   0010     0010     0009    0010    0010    0010     0009
N DET.    0003    0000    0000    0000    0000     0000    0000     0000   0000     0000     0000    0001    0000    0000     0000
MEAN      0.026   0.807   0.288   6.385   0.762    0.378   0.222    2.054   9.51    0.614    0.431   0.463   2.448   1.068    0.769
S. D.     0.015   0.222   0.089   2.440   0.116    0.173   0.103    0.312   1.07    0.140    0.132   0.157   1.135   0.318    0.190
OW        0.020   0.500   0.220   3.072   0.610    0.130   0.070    1.500   8.40    0.390    0.280   0.160   0.940   0.565    0.500
IGH       0.060   1.060   0.520  11.500   0.945    0.730   0.370    2.590  12.03    0.800    0.705   0.660   5.190   1.810    1.130

CLAM, BUTTER                   SAXIDOMUS GIGANTEA                191003   AREA- PACIFIC NORTHWEST   SITE- H7   SHUCKED, LARGE

LENGTH    NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
EIGHT     NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM  SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM      PPM     PPM      PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER    0010    0010    0009    0009    0009     0010    0010     0009   0010     0010     0010    0010    0010    0010     0010
N DET.    0008    0001    0000    0000    0000     0000    0000     0000   0000     0002     0000    0001    0000    0001     0000
MEAN      0.100   0.546   0.198   8.270   0.513    0.214   0.569    1.858  14.42    0.685    0.299   0.452   1.361   1.224    0.970
. D.      0.127   0.257   0.083   3.456   0.183    0.112   0.194    0.505   4.29    0.196    0.134   0.385   0.423   0.404    0.469
OW        0.010   0.120   0.070   2.495   0.300    0.070   0.324    1.214   8.36    0.430    0.120   0.125   0.865   0.630    0.595
IGH       0.190   1.032   0.325  13.110   0.843    0.480   0.910    3.030  24.15    1.006    0.630   1.130   2.190   2.000    2.250

CLAM, BUTTER                   SAXIDOMUS GIGANTEA                191003   AREA- PACIFIC NORTHWEST   SITE- I7   SHUCKED

ENGTH     NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
EIGHT     NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM  SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM      PPM     PPM      PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER    0004    0004    0004    0004    0004     0004    0004     0004   0004     0004     0004    0004    0004    0004     0003
N DET.    0003    0000    0000    0000    0000     0000    0000     0000   0000     0000     0003    0001    0000    0000     0000
MEAN      0.020   0.550   0.244   7.228   0.448    0.219   0.513    1.735   9.39    0.639    0.140   0.377   2.039   1.021    0.670
S. D.     0.000   0.246   0.100   4.035   0.096    0.029   0.327    0.464   1.23    0.201    0.000   0.329   0.715   0.521    0.020
OW        0.000   0.210   0.115   4.800   0.350    0.180   0.300    1.290   7.86    0.355    0.000   0.130   1.640   0.303    0.650
HIGH      0.020   0.780   0.360  13.250   0.580    0.250   1.000    2.360  10.62    0.790    0.140   0.750   3.110   1.430    0.690

CLAM, BUTTER                   SAXIDOMUS GIGANTEA                191003   AREA- PACIFIC NORTHWEST   SITE- N1   SHUCKED

LENGTH    NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
WEIGHT    NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM  SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM      PPM     PPM      PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER    0006    0006    0006    0006    0006     0006    0006     0006   0006     0006     0006    0006    0006    0006     0006
N DET.    0000    0000    0000    0000    0000     0000    0000     0000   0000     0000     0001    0000    0000    0001     0000
MEAN      0.036   0.735   0.178   5.004   0.521    0.783   0.521    2.019  12.84    0.775    0.130   0.268   2.337   1.160    0.613
S. D.     0.028   0.580   0.064   2.524   0.180    0.233   0.124    0.266   2.27    0.247    0.069   0.100   0.402   0.746    0.266
LOW       0.010   0.225   0.090   1.670   0.370    0.465   0.293    1.695  10.02    0.485    0.050   0.150   1.770   0.190    0.315
HIGH      0.080   1.853   0.270   7.796   0.780    1.035   0.640    2.355  15.72    1.110    0.220   0.400   2.800   2.130    1.000

CLAM, BUTTER                   SAXIDOMUS GIGANTEA                191003   AREA- PACIFIC NORTHWEST   SITE- R2   SHUCKED, EX. LARGE

LENGTH    NUM     9    MEAN        0.089   S. D.      0.000   LOW       0.089   HIGH          0.089
WEIGHT    NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM  SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM      PPM     PPM      PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER    0009    0009    0009    0009    0009     0009    0009     0008   0009     0009     0009    0009    0009    0009     0009
N DET.    0004    0000    0000    0000    0000     0000    0000     0000   0000     0000     0003    0000    0000    0002     0000
MEAN      0.033   0.773   0.249   8.795   0.493    0.273   0.639    1.806  11.11    0.998    0.193   0.511   1.547   0.849    0.793
S. D.     0.019   0.214   0.109   5.371   0.163    0.091   0.224    0.348   2.08    0.390    0.035   0.232   0.483   0.407    0.370
LOW       0.010   0.450   0.110   3.432   0.200    0.175   0.360    1.070   7.57    0.410    0.150   0.040   0.750   0.360    0.450
HIGH      0.055   1.125   0.445  18.840   0.740    0.430   1.107    2.210  14.73    1.500    0.255   0.815   2.250   1.630    1.475

CLAM, PAC. LITTLENECK          PROTOTHACA STAMINEA               191008   AREA- ALASKA              SITE- H7   SHUCKED

LENGTH    NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
WEIGHT    NUM     0    MEAN        0.000   S. D.      0.000   LOW       0.000   HIGH          0.000
         MERCURY   LEAD  CADMIUM ARSENIC SELENIUM  SILVER   CHROM   COPPER  ZINC    NICKEL   MOLYB VANADIUM  MANG  ANTIMONY   TIN
           PPM     PPM     PPM     PPM     PPM      PPM     PPM      PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

NUMBER    0001    0001    0001    0001    0001     0001    0001     0001   0001     0001     0001    0001    0001    0001     0001
N DET.    0001    0000    0000    0000    0000     0000    0000     0000   0000     0000     0000    0000    0000    0000     0000
MEAN      0.000   0.250   0.160   4.050   0.450    0.110   0.130    3.750   5.38    0.710    0.160   0.130   0.890   0.910    1.000
S. D.     0.000   0.000   0.000   0.000   0.000    0.000   0.000    0.000   0.00    0.000    0.000   0.000   0.000   0.000    0.000
LOW       0.000   0.000   0.000   0.000   0.000    0.000   0.000    0.000   0.00    0.000    0.000   0.000   0.000   0.000    0.000
HIGH      0.000   0.250   0.160   4.050   0.450    0.110   0.130    3.750   5.38    0.710    0.160   0.130   0.890   0.910    1.000
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REPORT M

LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

SHRIMP, ROYAL RED   HYMENOPANAES ROBUSTUS   192003   AREA- SOUTH ATLANTIC   SITE- F9   TAIL, PEELED

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	10	MEAN	0.025	S. D.	0.005	LOW	0.018	HIGH	0.030

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	0012	001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0006	0005	0000	0000	000
MEAN	0.074	0.660	0.118	48.340	0.755	0.070	0.193	3.069	12.06	0.346	0.163	0.293	0.362	0.965	0.86
S. D.	0.037	0.153	0.018	26.279	0.198	0.018	0.054	0.924	2.06	0.086	0.043	0.139	0.081	0.198	0.179
LOW	0.030	0.440	0.080	10.500	0.500	0.040	0.120	1.450	9.00	0.190	0.090	0.130	0.240	0.630	0.530
HIGH	0.150	0.940	0.140	92.700	1.190	0.110	0.310	4.690	15.13	0.500	0.190	0.440	0.490	1.345	1.250

SHRIMP, WHITE   PANAEUS SETIFERUS   192004   AREA- SOUTH ATLANTIC   SITE- B8   TAIL, PEELED

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0002	0003	0002	0000	0000	0003	0002	0000	0000	0004	0007	0007	0000	0005	0000
MEAN	0.096	0.751	0.066	5.756	0.595	0.095	0.279	2.165	11.07	0.345	0.103	0.487	0.350	1.061	0.722
S. D.	0.107	0.361	0.030	2.455	0.248	0.083	0.168	0.924	4.07	0.156	0.067	0.248	0.151	0.466	0.313
LOW	0.020	0.250	0.020	2.500	0.280	0.030	0.140	0.430	5.00	0.125	0.060	0.200	0.040	0.310	0.390
HIGH	0.310	1.250	0.110	9.000	1.030	0.220	0.630	3.960	19.64	0.605	0.180	0.630	0.530	1.595	1.250

SHRIMP, WHITE   PANAEUS SETIFERUS   192004   AREA- SOUTH ATLANTIC   SITE- F3   TAIL, PEELED

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0020	0020	0019	0020	0020	0020	0019	0020	0020	0020	0020	0020	0020	0020
N DET.	0002	0000	0005	0000	0001	0006	0000	0000	0000	0001	0010	0010	0000	0004	0000
MEAN	0.063	0.570	0.086	6.339	0.708	0.057	0.219	1.991	10.67	0.318	0.177	0.584	0.710	0.902	0.640
S. D.	0.038	0.365	0.078	2.716	0.347	0.048	0.127	0.677	2.69	0.157	0.080	0.429	0.480	0.447	0.210
LOW	0.020	0.060	0.040	3.440	0.240	0.020	0.030	1.040	4.31	0.070	0.100	0.110	0.180	0.060	0.350
HIGH	0.140	1.630	0.340	12.625	1.370	0.210	0.500	2.870	14.50	0.640	0.370	1.250	1.855	1.500	1.060

SHRIMP, WHITE   PANAEUS SETIFERUS   192004   AREA- GULF   SITE- D5   TAIL, PEELED

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	2	MEAN	0.021	S. D.	0.001	LOW	0.020	HIGH	0.022

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0003	0000	0002	0000	0000	0002	0000	0000	0000	0000	0003	0005	0000	0002	0000
MEAN	0.029	0.608	0.070	2.569	0.589	0.048	0.218	1.753	10.91	0.228	0.414	0.184	1.070	0.985	0.636
S. D.	0.016	0.348	0.042	1.791	0.183	0.011	0.147	0.287	3.91	0.070	0.318	0.082	0.271	0.127	0.169
LOW	0.015	0.305	0.040	0.700	0.300	0.030	0.040	1.430	6.12	0.140	0.060	0.105	0.760	0.750	0.450
HIGH	0.060	1.250	0.170	6.900	0.870	0.060	0.480	2.360	20.62	0.360	0.880	0.310	1.570	1.100	0.880

SHRIMP, WHITE   PANAEUS SETIFERUS   192004   AREA- GULF   SITE- D6   TAIL, PEELED

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	10	MEAN	0.026	S. D.	0.001	LOW	0.023	HIGH	0.028

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0009	0010	0008
N DET.	0008	0000	0000	0000	0000	0000	0001	0000	0000	0000	0009	0010	0000	0000	0000
MEAN	0.060	0.718	0.095	2.238	0.523	0.030	0.136	2.692	12.47	0.215	0.250	0.000	0.370	0.849	0.537
S. D.	0.057	0.510	0.042	1.513	0.161	0.009	0.038	0.207	1.93	0.063	0.000	0.000	0.067	0.235	0.113
LOW	0.020	0.190	0.050	0.450	0.250	0.010	0.060	2.280	9.63	0.100	0.000	0.000	0.260	0.380	0.310
HIGH	0.100	1.880	0.180	4.500	0.780	0.040	0.190	2.940	16.31	0.300	0.250	0.000	0.480	1.130	0.640

SHRIMP, WHITE   PANAEUS SETIFERUS   192004   AREA- GULF   SITE- E8   TAIL, PEELED

LENGTH	NUM	10	MEAN	0.043	S. D.	0.000	LOW	0.043	HIGH	0.043
WEIGHT	NUM	10	MEAN	0.008	S. D.	0.001	LOW	0.007	HIGH	0.010

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0008	0000	0000	0000	0000	0000	0000	0000	0000	0000	0008	0008	0000	0001	0000
MEAN	0.040	0.526	0.075	2.717	0.625	0.047	0.229	1.902	9.34	0.193	0.220	0.250	0.547	0.603	0.523
S. D.	0.000	0.150	0.010	1.199	0.240	0.012	0.109	0.163	2.16	0.041	0.042	0.184	0.129	0.154	0.200
LOW	0.040	0.280	0.060	1.293	0.150	0.020	0.130	1.630	3.44	0.125	0.190	0.120	0.310	0.380	0.265
HIGH	0.040	0.810	0.090	4.500	0.940	0.060	0.440	2.230	10.63	0.255	0.250	0.380	0.720	0.810	0.910

SHRIMP, WHITE   PANAEUS SETIFERUS   192004   AREA- GULF   SITE- H1   TAIL, PEELED

LENGTH	NUM	0	MEAN	0.000	S. D.	0.000	LOW	0.000	HIGH	0.000
WEIGHT	NUM	7	MEAN	0.020	S. D.	0.012	LOW	0.011	HIGH	0.047

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0017	0017	0015	0016	0017	0017	0017	0016	0017	0017	0016	0016	0017	0017	0015
N DET.	0003	0001	0004	0000	0000	0005	0001	0000	0000	0002	0012	0008	0000	0004	0000
MEAN	0.085	0.669	0.090	5.519	0.688	0.068	0.258	3.765	13.18	0.304	0.365	0.343	0.517	1.210	0.645
S. D.	0.086	0.222	0.037	2.732	0.165	0.043	0.131	1.112	3.29	0.152	0.309	0.196	0.149	0.622	0.173
LOW	0.020	0.360	0.025	0.600	0.340	0.030	0.030	1.990	8.36	0.120	0.020	0.190	0.305	0.460	0.385
HIGH	0.330	1.130	0.140	11.900	0.870	0.180	0.523	5.720	21.43	0.610	0.750	0.680	0.940	2.380	1.030

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS
IN RESOURCE SURVEY SPECIES;
BY TISSUE AND LOCATION

LOCATION LEVEL 5

SHRIMP, BROWN   PENAEUS AZTECUS   192005   AREA- GULF   SITE- D5   TAIL, PEELED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 10 MEAN 0.017 S. D. 0.001 LOW 0.016 HIGH 0.018

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0004	0000	0001	0001	0000	0001	0000	0000	0000	0000	0006	0006	0000	0002	0000
MEAN	0.077	0.574	0.061	3.308	0.592	0.048	0.229	2.348	11.52	0.347	0.280	0.210	1.303	1.071	0.570
S. D.	0.107	0.260	0.018	1.636	0.115	0.013	0.220	0.301	1.42	0.169	0.194	0.131	0.135	0.210	0.130
LOW	0.010	0.317	0.040	1.490	0.430	0.030	0.076	1.840	8.75	0.140	0.060	0.100	1.065	0.880	0.380
HIGH	0.290	1.060	0.085	6.260	0.730	0.070	0.690	2.690	13.21	0.610	0.500	0.360	1.460	1.400	0.815

SHRIMP, BROWN   PENAEUS AZTECUS   192005   AREA- GULF   SITE- D6   TAIL, PEELED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 9 MEAN 0.013 S. D. 0.000 LOW 0.012 HIGH 0.014

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0009	0010	0010	0009
N DET.	0008	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0006	0000	0001	0000
MEAN	0.085	0.723	0.094	2.501	0.521	0.034	0.190	2.475	11.08	0.235	0.000	0.235	0.733	0.829	0.573
S. D.	0.092	0.546	0.027	1.056	0.195	0.006	0.060	0.673	2.35	0.070	0.000	0.065	0.192	0.280	0.142
LOW	0.020	0.250	0.060	1.250	0.230	0.030	0.130	1.540	6.50	0.160	0.000	0.190	0.480	0.500	0.310
HIGH	0.150	2.060	0.135	4.000	0.930	0.045	0.310	3.940	14.94	0.380	0.000	0.310	0.980	1.130	0.750

SHRIMP, BROWN   PENAEUS AZTECUS   192005   AREA- GULF   SITE- E5   TAIL, PEELED

LENGTH NUM 13 MEAN 0.130 S. D. 0.009 LOW 0.111 HIGH 0.142
WEIGHT NUM 12 MEAN 0.020 S. D. 0.003 LOW 0.015 HIGH 0.025

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0013	0013	0013	0011	0011	0013	0013	0013	0012	0012	0013	0013	0013	0013	0012
N DET.	0007	0000	0003	0001	0000	0005	0001	0000	0000	0003	0009	0008	0000	0004	0000
MEAN	0.031	0.584	0.088	5.272	0.674	0.044	0.262	4.214	11.50	0.252	0.434	0.339	0.554	0.742	0.705
S. D.	0.012	0.248	0.039	2.469	0.212	0.023	0.156	0.882	3.01	0.114	0.298	0.135	0.268	0.454	0.373
LOW	0.020	0.250	0.040	1.300	0.280	0.020	0.060	2.865	6.68	0.080	0.235	0.180	0.200	0.060	0.250
HIGH	0.050	1.100	0.160	10.000	1.010	0.090	0.630	5.710	16.33	0.500	0.870	0.500	1.210	1.630	1.750

SHRIMP, BROWN   PENAEUS AZTECUS   192005   AREA- GULF   SITE- H1   TAIL, PEELED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 3 MEAN 0.015 S. D. 0.001 LOW 0.014 HIGH 0.016

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0000	0000
MEAN	0.040	0.495	0.067	6.597	0.755	0.038	0.337	2.638	9.09	0.237	0.190	0.310	0.550	0.897	0.598
S. D.	0.014	0.113	0.035	3.198	0.246	0.016	0.261	0.752	1.46	0.093	0.000	0.000	0.164	0.377	0.157
LOW	0.030	0.420	0.030	2.950	0.515	0.020	0.130	2.005	7.65	0.130	0.000	0.000	0.370	0.500	0.505
HIGH	0.050	0.625	0.100	8.925	1.006	0.050	0.630	3.470	10.56	0.300	0.190	0.310	0.690	1.250	0.780

SHRIMP, BROWN   PENAEUS AZTECUS   192005   AREA- GULF   SITE- H2   TAIL, PEELED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 7 MEAN 0.026 S. D. 0.001 LOW 0.024 HIGH 0.028

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0017	0017	0017	0016	0016	0017	0017	0017	0016	0017	0017	0017	0017	0017	0016
N DET.	0003	0001	0003	0000	0000	0003	0003	0000	0000	0001	0011	0006	0000	0007	0000
MEAN	0.113	0.662	0.080	10.569	0.589	0.054	0.234	3.760	11.76	0.361	0.138	0.361	0.410	0.947	0.611
S. D.	0.046	0.336	0.022	6.436	0.175	0.038	0.129	0.787	2.93	0.240	0.048	0.135	0.185	0.423	0.155
LOW	0.050	0.250	0.050	1.300	0.320	0.020	0.050	2.310	4.93	0.150	0.060	0.220	0.180	0.320	0.380
HIGH	0.210	1.285	0.140	32.500	0.870	0.180	0.410	5.290	15.71	1.110	0.190	0.600	0.735	1.630	0.925

SHRIMP, OCEAN   PANDALUS JORDANI   192007   AREA- PACIFIC NORTHWEST   SITE- R5   TAIL, PEELED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0008	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0008
N DET.	0006	0000	0000	0000	0000	0001	0000	0000	0000	0000	0007	0008	0000	0000	0000
MEAN	0.136	0.658	0.157	3.835	0.311	0.118	0.286	1.979	11.59	0.260	0.167	0.185	0.251	0.861	0.773
S. D.	0.088	0.269	0.075	1.889	0.180	0.140	0.253	0.499	1.96	0.079	0.032	0.007	0.148	0.203	0.314
LOW	0.020	0.250	0.110	1.716	0.070	0.030	0.095	1.245	9.21	0.170	0.130	0.180	0.120	0.590	0.425
HIGH	0.210	1.090	0.330	7.225	0.600	0.480	0.810	2.860	15.00	0.420	0.190	0.190	0.630	1.310	1.410

SHRIMP, PINK   PENAEUS DUORARUM   192010   AREA- GULF   SITE- E5   TAIL, PEELED

LENGTH NUM 20 MEAN 0.097 S. D. 0.008 LOW 0.085 HIGH 0.125
WEIGHT NUM 20 MEAN 0.007 S. D. 0.004 LOW 0.003 HIGH 0.017

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0020	0019	0020	0020	0019	0020	0020	0020	0019	0019	0020	0020	0020	0020	0020
N DET.	0010	0000	0001	0000	0000	0004	0000	0000	0000	0000	0011	0010	0000	0013	0000
MEAN	0.114	0.676	0.106	4.251	0.636	0.060	0.255	3.098	11.39	0.353	0.231	0.726	0.685	0.996	0.772
S. D.	0.178	0.357	0.044	2.015	0.204	0.025	0.135	1.018	1.80	0.115	0.097	0.848	0.291	0.336	0.320
LOW	0.010	0.395	0.065	1.660	0.220	0.020	0.100	0.430	8.03	0.165	0.090	0.110	0.120	0.500	0.350
HIGH	0.560	1.630	0.250	8.460	1.180	0.110	0.500	4.555	15.71	0.710	0.380	2.880	1.220	1.345	1.750

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SHRIMP, PINK   PENAEUS DUORARUM   192010   AREA- GULF   SITE- L5   TAIL, PEELED

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	10	0.003	0.000	0.003	0.003

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0002	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0001	0000
MEAN	0.130	0.624	0.141	8.262	0.359	0.084	0.237	2.484	9.41	0.321	0.144	0.274	0.174	1.193	0.876
S. D.	0.140	0.332	0.048	3.568	0.115	0.038	0.236	1.112	2.13	0.086	0.046	0.205	0.054	0.190	0.473
LOW	0.020	0.070	0.060	4.350	0.180	0.030	0.080	0.220	3.83	0.155	0.060	0.060	0.096	0.910	0.310
HIGH	0.420	1.335	0.210	15.650	0.525	0.145	0.865	4.120	11.81	0.430	0.190	0.650	0.255	1.485	1.800

SHRIMP, PINK   PENAEUS DUORARUM   192010   AREA- GULF   SITE- R5   TAIL, PEELED

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0005	0000	0000	0000	0000	0002	0000	0000	0000	0001	0007	0005	0000	0001	0000
MEAN	0.034	0.690	0.142	3.446	0.449	0.042	0.218	1.185	11.40	0.212	0.133	0.376	0.180	0.947	0.650
S. D.	0.017	0.455	0.082	1.287	0.139	0.017	0.107	0.474	4.22	0.061	0.059	0.185	0.068	0.508	0.162
LOW	0.020	0.305	0.070	1.090	0.270	0.010	0.060	0.610	7.81	0.130	0.090	0.220	0.095	0.500	0.450
HIGH	0.060	1.595	0.320	5.300	0.660	0.065	0.380	1.905	21.78	0.305	0.200	0.690	0.290	2.000	0.880

SHRIMP, PINK   PENAEUS DUORARUM   192010   AREA- GULF   SITE- R6   TAIL, PEELED

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0008	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0002	0000	0000	0000
MEAN	0.030	0.661	0.172	4.614	0.464	0.053	0.178	1.464	10.33	0.286	0.193	0.274	0.215	0.885	0.702
S. D.	0.000	0.186	0.024	1.963	0.246	0.009	0.039	0.700	2.63	0.088	0.058	0.157	0.048	0.194	0.103
LOW	0.000	0.380	0.140	1.350	0.210	0.040	0.125	0.740	6.56	0.180	0.120	0.120	0.150	0.630	0.535
HIGH	0.030	0.940	0.210	7.750	1.100	0.060	0.250	2.910	16.25	0.480	0.250	0.630	0.330	1.250	0.880

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- NORTH ATLANTIC   SITE-   TAIL, PEELED

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	9	0.004	0.003	0.002	0.009

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009	0009
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0006	0000	0007	0000
MEAN	0.037	0.419	0.100	6.720	0.703	0.116	0.186	2.381	10.80	0.401	0.140	0.300	0.374	0.905	0.948
S. D.	0.020	0.058	0.027	6.006	0.870	0.025	0.105	0.635	6.31	0.082	0.028	0.151	0.150	0.841	0.283
LOW	0.020	0.310	0.060	1.750	0.190	0.085	0.060	1.310	7.07	0.235	0.100	0.180	0.230	0.310	0.600
HIGH	0.070	0.500	0.145	20.625	2.950	0.165	0.435	2.880	27.34	0.520	0.160	0.470	0.660	1.500	1.415

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- NORTH ATLANTIC   SITE- E9   TAIL, PEELED

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	0	0.000	0.000	0.000	0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0000	0000
MEAN	0.000	0.380	0.110	13.500	0.410	0.030	0.230	6.280	10.36	0.710	0.000	0.000	0.360	1.050	0.500
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.000	0.380	0.110	13.500	0.410	0.030	0.230	6.280	10.36	0.710	0.000	0.000	0.360	1.050	0.500

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- NORTH ATLANTIC   SITE- I2   TAIL, PEELED

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	10	0.003	0.000	0.002	0.004

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0003	0000	0004	0000
MEAN	0.050	0.650	0.142	12.973	0.482	0.158	0.253	2.669	10.64	0.371	0.180	0.787	0.427	1.434	0.888
S. D.	0.041	0.301	0.033	6.163	0.119	0.039	0.089	0.744	1.40	0.069	0.039	0.395	0.154	0.117	0.212
LOW	0.020	0.315	0.100	6.210	0.380	0.110	0.130	1.380	7.65	0.290	0.160	0.130	0.205	1.310	0.560
HIGH	0.130	1.310	0.210	25.000	0.690	0.210	0.380	3.500	11.88	0.460	0.250	1.315	0.650	1.630	1.190

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- NORTH ATLANTIC   SITE- I5   TAIL, PEELED

	NUM	MEAN	S. D.	LOW	HIGH
LENGTH	0	0.000	0.000	0.000	0.000
WEIGHT	4	0.003	0.001	0.001	0.004

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0003	0000
MEAN	0.050	0.539	0.115	6.777	0.367	0.145	0.255	2.696	8.80	0.395	0.190	0.565	0.306	0.970	0.960
S. D.	0.052	0.124	0.025	1.648	0.024	0.028	0.112	0.697	1.53	0.129	0.000	0.000	0.066	0.000	0.332
LOW	0.020	0.440	0.093	5.300	0.345	0.120	0.130	1.830	7.34	0.243	0.000	0.000	0.220	0.000	0.606
HIGH	0.110	0.720	0.150	9.075	0.400	0.185	0.380	3.535	10.21	0.555	0.190	0.565	0.375	0.970	1.265

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- NORTH ATLANTIC   SITE- I6   TAIL, PEELED

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 2   MEAN 0.006   S. D. 0.001   LOW 0.005   HIGH 0.007

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0002	0000	0001	0000
MEAN	0.020	0.410	0.115	11.688	0.415	0.150	0.190	2.065	8.22	0.385	0.000	0.000	0.495	0.130	0.735
S. D.	0.000	0.042	0.035	5.745	0.219	0.014	0.000	0.262	1.02	0.007	0.000	0.000	0.092	0.000	0.502
LOW	0.000	0.380	0.090	7.625	0.260	0.140	0.190	1.880	7.50	0.380	0.000	0.000	0.430	0.000	0.380
HIGH	0.020	0.440	0.140	15.750	0.570	0.160	0.190	2.250	8.94	0.390	0.000	0.000	0.560	0.130	1.090

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- NORTH ATLANTIC   SITE- J1   TAIL, PEELED

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 10   MEAN 0.004   S. D. 0.001   LOW 0.003   HIGH 0.006

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0011	0011	0011	0011	0011	0011	0011	0010	0011	0011	0011	0011	0011	0011	0010
N DET.	0007	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0009	0000	0008	0000
MEAN	0.048	0.590	0.117	9.785	0.475	0.135	0.312	2.816	11.16	0.402	0.160	0.285	0.395	0.407	0.876
S. D.	0.026	0.296	0.028	3.144	0.128	0.036	0.218	1.562	3.61	0.106	0.000	0.134	0.116	0.541	0.112
LOW	0.020	0.250	0.090	6.350	0.300	0.090	0.060	1.440	8.50	0.210	0.160	0.190	0.225	0.060	0.690
HIGH	0.070	1.250	0.180	15.225	0.730	0.190	0.750	5.630	21.25	0.560	0.160	0.380	0.620	1.030	1.060

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- NORTH ATLANTIC   SITE- J2   TAIL, PEELED

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 3   MEAN 0.007   S. D. 0.001   LOW 0.006   HIGH 0.008

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0003	0000
MEAN	0.055	0.500	0.097	17.911	0.547	0.087	0.158	2.025	9.07	0.258	0.000	0.190	0.298	0.000	0.617
S. D.	0.049	0.167	0.010	2.816	0.185	0.034	0.081	0.459	0.42	0.035	0.000	0.000	0.014	0.000	0.048
LOW	0.020	0.310	0.085	14.666	0.425	0.060	0.095	1.505	8.69	0.225	0.000	0.000	0.290	0.000	0.565
HIGH	0.090	0.625	0.105	19.716	0.760	0.125	0.250	2.375	9.53	0.295	0.000	0.190	0.315	0.000	0.660

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- NORTH ATLANTIC   SITE- J7   TAIL, PEELED

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 1   MEAN 0.007   S. D. 0.000   LOW 0.007   HIGH 0.007

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0001	0000
MEAN	0.020	0.456	0.116	19.300	0.546	0.106	0.140	2.650	10.89	0.296	0.000	0.175	0.430	0.000	0.710
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.020	0.456	0.116	19.300	0.546	0.106	0.140	2.650	10.89	0.296	0.000	0.175	0.430	0.000	0.710

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- NORTH ATLANTIC   SITE- K1   TAIL, PEELED

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 3   MEAN 0.007   S. D. 0.001   LOW 0.007   HIGH 0.008

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0001	0003	0003	0003	0003	0003	0003	0003	0003
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0003	0000	0003	0000
MEAN	0.027	0.420	0.123	13.467	0.490	0.063	0.130	1.940	11.73	0.317	0.000	0.000	0.267	0.000	0.717
S. D.	0.012	0.193	0.012	4.767	0.052	0.015	0.000	0.947	1.49	0.170	0.000	0.000	0.038	0.000	0.143
LOW	0.020	0.250	0.110	8.950	0.460	0.050	0.000	0.860	10.50	0.140	0.000	0.000	0.240	0.000	0.560
HIGH	0.040	0.630	0.130	18.450	0.550	0.080	0.130	2.630	13.38	0.480	0.000	0.000	0.310	0.000	0.840

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- ALASKA   SITE- K3   TAIL, PEELED

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0009	0000	0000	0000	0000	0000	0001	0000	0000	0000	0006	0007	0000	0000	0000
MEAN	0.050	0.550	0.100	3.233	0.256	0.084	0.128	2.431	10.71	0.283	0.085	0.240	0.313	0.790	0.695
S. D.	0.000	0.193	0.019	1.395	0.131	0.017	0.059	0.741	2.27	0.089	0.050	0.087	0.074	0.199	0.156
LOW	0.000	0.310	0.080	1.000	0.080	0.060	0.060	1.630	9.13	0.140	0.060	0.190	0.170	0.410	0.500
HIGH	0.050	0.880	0.130	5.650	0.570	0.115	0.210	4.310	16.88	0.410	0.160	0.340	0.430	1.075	0.880

SHRIMP, PINK (NORTHERN)   PANDALUS BOREALIS   192011   AREA- ALASKA   SITE- 07   TAIL, PEELED

LENGTH   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000
WEIGHT   NUM 0   MEAN 0.000   S. D. 0.000   LOW 0.000   HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0009	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0009
N DET.	0005	0000	0000	0000	0000	0000	0000	0000	0000	0000	0007	0006	0000	0001	0000
MEAN	0.063	0.892	0.197	8.887	0.464	0.148	0.142	4.294	12.40	0.376	0.160	0.250	0.462	1.060	0.667
S. D.	0.033	0.421	0.047	4.559	0.153	0.039	0.042	0.960	1.18	0.146	0.030	0.131	0.068	0.299	0.105
LOW	0.040	0.500	0.110	4.500	0.260	0.060	0.060	3.630	11.00	0.220	0.130	0.090	0.350	0.720	0.500
HIGH	0.110	1.630	0.265	17.600	0.750	0.200	0.190	6.880	15.00	0.580	0.190	0.410	0.590	1.630	0.810

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

REPORT MF

SHRIMP, ALASKA (SIDESTRIPE) PANDALOPSIS DISPAR 192012 AREA- ALASKA SITE- L4 TAIL, PEELED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0004	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0004	0000	0000	0000
MEAN	0.168	0.734	0.146	4.197	0.261	0.066	0.185	4.403	13.68	0.309	0.155	0.252	0.381	0.942	0.729
S. D.	0.123	0.386	0.061	2.085	0.134	0.018	0.083	1.962	3.75	0.162	0.035	0.082	0.042	0.253	0.240
LOW	0.050	0.440	0.080	2.350	0.155	0.045	0.095	2.360	9.69	0.130	0.130	0.190	0.330	0.705	0.380
HIGH	0.295	1.560	0.230	8.375	0.550	0.100	0.310	8.250	20.87	0.580	0.180	0.345	0.440	1.380	1.130

SHRIMP, ALASKA (SIDESTRIPE) PANDALOPSIS DISPAR 192012 AREA- ALASKA SITE- N6 TAIL, PEELED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010
N DET.	0007	0000	0000	0000	0000	0000	0001	0000	0000	0000	0009	0005	0000	0000	0000
MEAN	0.040	0.651	0.085	4.711	0.340	0.079	0.158	5.627	13.48	0.227	0.220	0.524	0.326	0.822	1.054
S. D.	0.020	0.224	0.042	1.366	0.152	0.035	0.036	1.681	2.13	0.054	0.000	0.584	0.061	0.291	0.301
LOW	0.020	0.440	0.035	2.778	0.150	0.040	0.110	4.250	8.75	0.140	0.000	0.130	0.230	0.380	0.500
HIGH	0.060	1.130	0.190	6.500	0.580	0.160	0.220	9.130	15.94	0.305	0.220	1.560	0.430	1.310	1.500

LOBSTER, SPINY (ATL.) PANULIRUS ARGUS 194002 AREA- SOUTH ATLANTIC SITE- M4 TAIL MEAT

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0009	0010
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0010	0008	0000	0000	0000
MEAN	0.190	0.599	0.093	13.991	0.235	0.034	0.170	3.854	22.02	0.253	0.000	0.375	0.132	0.863	0.516
S. D.	0.067	0.203	0.022	5.487	0.125	0.010	0.103	1.732	3.34	0.088	0.000	0.262	0.026	0.275	0.151
LOW	0.120	0.380	0.060	5.550	0.050	0.010	0.060	0.030	17.00	0.110	0.000	0.190	0.095	0.500	0.345
HIGH	0.340	0.940	0.135	22.250	0.420	0.045	0.380	6.810	27.50	0.440	0.000	0.560	0.180	1.220	0.880

LOBSTER, SPINY (ATL.) PANULIRUS ARGUS 194002 AREA- SOUTH ATLANTIC SITE- N1 TAIL MEAT

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 10 MEAN 0.547 S. D. 0.070 LOW 0.410 HIGH 0.674

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
N DET.	0001	0000	0001	0000	0000	0003	0001	0000	0000	0000	0003	0004	0000	0001	0000
MEAN	0.061	0.597	0.058	17.188	0.294	0.054	0.195	3.919	26.30	0.328	0.446	0.314	0.154	1.050	0.697
S. D.	0.052	0.300	0.022	7.489	0.157	0.018	0.119	2.257	22.34	0.151	0.336	0.305	0.076	0.366	0.290
LOW	0.020	0.300	0.035	4.190	0.140	0.030	0.080	0.520	4.69	0.140	0.060	0.060	0.040	0.630	0.450
HIGH	0.170	1.310	0.090	31.200	0.515	0.080	0.410	7.570	81.25	0.540	0.870	0.870	0.275	1.685	1.390

LOBSTER, SPINY (ATL.) PANULIRUS ARGUS 194002 AREA- GULF SITE- L9 TAIL MEAT

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0007	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0007
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0005	0000	0000	0000
MEAN	0.084	0.782	0.139	19.170	0.394	0.069	0.141	3.727	14.61	0.298	0.198	0.455	0.176	1.031	0.726
S. D.	0.036	0.369	0.065	7.130	0.291	0.015	0.063	1.225	2.28	0.051	0.118	0.183	0.030	0.381	0.211
LOW	0.030	0.440	0.095	7.750	0.150	0.060	0.080	1.880	11.19	0.220	0.060	0.265	0.130	0.630	0.380
HIGH	0.150	1.500	0.280	26.575	1.020	0.100	0.250	5.620	17.25	0.380	0.370	0.630	0.220	1.750	1.050

LOBSTER, SPINY (ATL.) PANULIRUS ARGUS 194002 AREA- GULF SITE- R6 TAIL MEAT

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 12 MEAN 0.520 S. D. 0.065 LOW 0.403 HIGH 0.636

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0012	0012	0012	0012	0012	0012	0012	0012	0010	0012	0012	0012	0012	0012	0012
N DET.	0003	0000	0001	0000	0001	0005	0001	0000	0000	0001	0008	0007	0000	0001	0000
MEAN	0.055	0.598	0.057	17.520	0.230	0.069	0.200	3.753	20.08	0.353	0.455	0.552	0.205	1.085	0.797
S. D.	0.052	0.426	0.032	12.985	0.174	0.031	0.133	1.576	3.69	0.232	0.575	0.377	0.123	0.354	0.316
LOW	0.025	0.120	0.011	7.100	0.030	0.030	0.085	0.180	12.50	0.140	0.100	0.120	0.040	0.500	0.380
HIGH	0.190	1.500	0.130	55.070	0.590	0.130	0.500	5.500	24.53	0.890	1.310	0.940	0.460	1.630	1.500

LOBSTER, SPINY (PAC.) PANULIRUS INTERRUPTUS 194003 AREA- CALIFORNIA SITE- K3 TAIL MEAT

LENGTH NUM 5 MEAN 0.085 S. D. 0.001 LOW 0.084 HIGH 0.086
WEIGHT NUM 5 MEAN 0.478 S. D. 0.013 LOW 0.462 HIGH 0.493

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0004	0004	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0000	0000	0000
MEAN	0.064	0.547	0.245	25.356	0.336	0.091	0.129	9.819	16.54	0.335	0.194	0.365	0.234	0.974	1.163
S. D.	0.017	0.072	0.135	7.155	0.146	0.021	0.056	2.215	7.58	0.069	0.182	0.361	0.039	0.430	0.339
LOW	0.050	0.480	0.150	19.390	0.215	0.060	0.070	6.535	3.75	0.270	0.060	0.110	0.180	0.310	0.655
HIGH	0.090	0.630	0.480	35.700	0.540	0.120	0.215	11.880	23.28	0.440	0.440	0.620	0.290	1.370	1.500

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES: BY TISSUE AND LOCATION

LOCATION LEVEL 5

LOBSTER, NORTHERN (AMERICAN) HOMARUS AMERICANUS 194012 AREA- NORTH ATLANTIC SITE- E9 CLAW & TAIL MEAT

LENGTH	NUM	1	MEAN	0.415	S. D.	0.000	LOW	0.415	HIGH	0.415
WEIGHT	NUM	2	MEAN	1.575	S. D.	1.104	LOW	0.794	HIGH	2.355

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0000	0000
MEAN	0.115	0.495	0.200	31.650	0.765	0.495	0.185	16.560	34.53	0.305	0.120	0.000	0.870	0.690	0.640
S. D.	0.035	0.007	0.127	7.460	0.092	0.007	0.177	0.438	2.43	0.078	0.000	0.000	0.198	0.354	0.198
LOW	0.090	0.490	0.110	26.375	0.700	0.490	0.060	16.250	32.81	0.250	0.000	0.000	0.730	0.440	0.500
HIGH	0.140	0.500	0.290	36.925	0.830	0.500	0.310	16.870	36.25	0.360	0.120	0.000	1.010	0.940	0.780

LOBSTER, NORTHERN (AMERICAN) HOMARUS AMERICANUS 194012 AREA- NORTH ATLANTIC SITE- I9 CLAW & TAIL MEAT

LENGTH	NUM	2	MEAN	0.273	S. D.	0.081	LOW	0.215	HIGH	0.330
WEIGHT	NUM	2	MEAN	0.745	S. D.	0.552	LOW	0.354	HIGH	1.135

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002	0002
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0000	0000
MEAN	0.175	0.560	0.245	15.019	0.838	0.318	0.108	13.220	42.03	0.385	0.180	0.000	0.295	1.010	0.880
S. D.	0.148	0.099	0.134	8.052	0.074	0.046	0.018	1.018	1.10	0.035	0.000	0.000	0.148	0.099	0.255
LOW	0.070	0.490	0.150	9.325	0.786	0.285	0.095	12.500	41.25	0.360	0.000	0.000	0.190	0.940	0.700
HIGH	0.280	0.630	0.340	20.712	0.890	0.350	0.120	13.940	42.81	0.410	0.180	0.000	0.400	1.080	1.060

LOBSTER, NORTHERN (AMERICAN) HOMARUS AMERICANUS 194012 AREA- NORTH ATLANTIC SITE- J3 CLAW & TAIL MEAT

LENGTH	NUM	8	MEAN	0.260	S. D.	0.025	LOW	0.225	HIGH	0.310
WEIGHT	NUM	7	MEAN	1.107	S. D.	0.338	LOW	0.880	HIGH	1.844

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0004	0000	0001	0000
MEAN	0.205	0.531	0.297	19.422	0.878	0.432	0.235	13.426	24.95	0.414	0.132	0.313	0.783	0.884	0.666
S. D.	0.142	0.190	0.143	11.567	0.229	0.160	0.195	2.976	7.50	0.125	0.061	0.279	0.477	0.167	0.260
LOW	0.075	0.330	0.160	8.800	0.630	0.250	0.076	9.715	11.31	0.265	0.085	0.060	0.440	0.560	0.390
HIGH	0.440	0.880	0.570	43.050	1.315	0.680	0.690	18.630	35.65	0.680	0.250	0.690	1.860	1.120	1.120

LOBSTER, NORTHERN (AMERICAN) HOMARUS AMERICANUS 194012 AREA- NORTH ATLANTIC SITE- J5 CLAW & TAIL MEAT

LENGTH	NUM	7	MEAN	0.323	S. D.	0.023	LOW	0.305	HIGH	0.350
WEIGHT	NUM	7	MEAN	1.072	S. D.	0.239	LOW	0.823	HIGH	1.476

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007	0007
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0000	0000
MEAN	0.219	0.571	0.229	41.331	1.253	0.406	0.144	18.649	31.28	0.386	0.075	0.376	1.007	0.798	0.674
S. D.	0.128	0.129	0.208	24.246	0.241	0.164	0.031	5.062	3.82	0.078	0.030	0.190	0.383	0.188	0.089
LOW	0.100	0.380	0.105	17.790	0.976	0.230	0.120	12.625	28.12	0.300	0.060	0.220	0.620	0.560	0.590
HIGH	0.460	0.750	0.695	82.783	1.650	0.630	0.190	25.630	38.44	0.515	0.120	0.630	1.810	1.130	0.815

LOBSTER, NORTHERN (AMERICAN) HOMARUS AMERICANUS 194012 AREA- NORTH ATLANTIC SITE- J6 CLAW & TAIL MEAT

LENGTH	NUM	19	MEAN	0.303	S. D.	0.059	LOW	0.197	HIGH	0.402
WEIGHT	NUM	18	MEAN	1.302	S. D.	0.599	LOW	0.262	HIGH	2.951

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0019	0019	0019	0019	0015	0019	0018	0019	0018	0019	0019	0019	0018	0019	0018
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0009	0005	0000	0002	0000
MEAN	0.185	0.560	0.196	24.431	1.014	0.523	0.227	17.868	31.52	0.362	0.153	0.322	0.682	1.019	0.756
S. D.	0.089	0.164	0.091	12.335	0.388	0.181	0.134	6.297	38.91	0.096	0.103	0.228	0.356	0.364	0.206
LOW	0.050	0.190	0.070	4.400	0.570	0.240	0.060	10.620	12.50	0.235	0.060	0.060	0.140	0.440	0.425
HIGH	0.400	0.875	0.350	48.000	1.895	0.890	0.630	29.560	180.49	0.640	0.410	0.880	1.485	1.810	1.130

LOBSTER, NORTHERN (AMERICAN) HOMARUS AMERICANUS 194012 AREA- NORTH ATLANTIC SITE- J9 CLAW & TAIL MEAT

LENGTH	NUM	7	MEAN	0.404	S. D.	0.113	LOW	0.301	HIGH	0.575
WEIGHT	NUM	7	MEAN	2.506	S. D.	1.694	LOW	0.891	HIGH	5.022

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0008	0008	0007	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008	0008
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0007	0000	0000	0000
MEAN	0.263	0.509	0.143	27.096	0.563	0.479	0.148	15.500	20.68	0.348	0.110	0.110	0.426	0.891	0.612
S. D.	0.187	0.314	0.079	14.997	0.213	0.268	0.046	7.424	6.38	0.100	0.093	0.000	0.206	0.300	0.172
LOW	0.085	0.190	0.040	10.650	0.250	0.130	0.085	5.750	13.75	0.260	0.060	0.000	0.250	0.410	0.380
HIGH	0.590	1.180	0.280	51.247	0.840	0.925	0.220	24.375	31.56	0.530	0.250	0.110	0.850	1.405	0.905

LOBSTER, NORTHERN (AMERICAN) HOMARUS AMERICANUS 194012 AREA- NORTH ATLANTIC SITE- K3 CLAW & TAIL MEAT

LENGTH	NUM	1	MEAN	0.445	S. D.	0.000	LOW	0.445	HIGH	0.445
WEIGHT	NUM	1	MEAN	2.923	S. D.	0.000	LOW	2.923	HIGH	2.923

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000
MEAN	0.445	0.560	0.180	41.633	1.000	0.620	0.125	16.690	30.62	0.320	0.130	0.000	1.425	0.740	0.580
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.000
HIGH	0.445	0.560	0.180	41.633	1.000	0.620	0.125	16.690	30.62	0.320	0.130	0.000	1.425	0.740	0.580

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                                           TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                      REPORT   MF1
                                           IN RESOURCE SURVEY SPECIES:
 LOCATION LEVEL 5                          BY TISSUE AND LOCATION


 LOBSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                      194012   AREA- NORTH ATLANTIC      SITE- K5   CLAW & TAIL ME

LENGTH      NUM    7   MEAN         0.345   S. D.       0.023   LOW       0.302   HIGH        0.370
WEIGHT      NUM    6   MEAN         1.426   S. D.       0.350   LOW       0.794   HIGH        1.731
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM       PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0007     0007    0007    0007    0007    0007    0007    0006    0006    0007      0007    0007    0007    0007     0007
N DET.      0000     0000    0000    0000    0000    0000    0000    0000    0000    0000      0004    0006    0000    0000     0000
MEAN       0.240    0.629   0.203  31.101   0.631   0.493   0.201  15.275   70.63   0.379     0.207   0.940   0.519   0.854    0.604
S. D.      0.129    0.318   0.110  13.905   0.239   0.179   0.236   6.101   64.38   0.124     0.177   0.000   0.166   0.424    0.147
LOW        0.130    0.300   0.090  15.930   0.300   0.240   0.060   9.065   28.12   0.290     0.090   0.000   0.260   0.440    0.370
HIGH       0.470    1.250   0.430  57.600   1.000   0.780   0.720  26.965  183.45   0.640     0.410   0.940   0.670   1.440    0.780


 LOBSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                      194012   AREA- NORTH ATLANTIC      SITE- O1   CLAW & TAIL ME

LENGTH      NUM    1   MEAN         0.232   S. D.       0.000   LOW       0.232   HIGH        0.232
WEIGHT      NUM    1   MEAN         0.577   S. D.       0.000   LOW       0.577   HIGH        0.577
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM       PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0001     0001    0001    0001    0001    0001    0001    0001    0001    0001      0001    0001    0001    0001     0001
N DET.      0000     0000    0000    0000    0000    0000    0000    0000    0000    0000      0001    0000    0000    0000     0000
MEAN       0.325    0.655   0.230   4.400   0.863   0.190   0.135  14.655   17.50   0.300     0.000   0.605   0.505   1.000    0.565
S. D.      0.000    0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000     0.000   0.000   0.000   0.000    0.000
LOW        0.000    0.000   0.000   0.000   0.000   0.000   0.000   0.000    0.00   0.000     0.000   0.000   0.000   0.000    0.000
HIGH       0.325    0.655   0.230   4.400   0.863   0.190   0.135  14.655   17.50   0.300     0.000   0.605   0.505   1.000    0.565


 LOBSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                      194012   AREA- NORTH ATLANTIC      SITE- O3   CLAW & TAIL ME

LENGTH      NUM    5   MEAN         0.220   S. D.       0.046   LOW       0.166   HIGH        0.290
WEIGHT      NUM    2   MEAN         0.702   S. D.       0.652   LOW       0.241   HIGH        1.163
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM       PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0005     0005    0004    0004    0004    0005    0005    0005    0005    0005      0005    0005    0005    0005     0005
N DET.      0000     0000    0000    0000    0000    0000    0000    0000    0000    0000      0002    0002    0000    0002     0000
MEAN       0.115    0.522   0.164   9.684   1.288   0.423   0.208  16.320   19.27   0.357     0.293   0.250   0.569   0.697    0.702
S. D.      0.031    0.184   0.050   5.063   0.384   0.074   0.157   7.801    7.11   0.084     0.261   0.060   0.169   0.339    0.056
LOW        0.070    0.310   0.090   3.800   0.820   0.360   0.060   7.310   10.00   0.250     0.100   0.190   0.385   0.310    0.620
HIGH       0.150    0.750   0.195  16.050   1.730   0.510   0.416  28.130   28.31   0.460     0.590   0.310   0.810   0.940    0.750


 LOBSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                      194012   AREA- NORTH ATLANTIC      SITE- P1   CLAW & TAIL ME

LENGTH      NUM    4   MEAN         0.274   S. D.       0.054   LOW       0.199   HIGH        0.320
WEIGHT      NUM    3   MEAN         1.343   S. D.       0.399   LOW       0.964   HIGH        1.759
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM       PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0006     0006    0006    0006    0005    0006    0006    0006    0006    0006      0006    0006    0006    0006     0006
N DET.      0000     0000    0000    0000    0000    0000    0000    0000    0000    0000      0002    0003    0000    0000     0000
MEAN       0.193    0.553   0.230  11.435   0.702   0.427   0.219  20.319   22.09   0.267     0.215   0.325   0.373   0.900    0.757
S. D.      0.064    0.154   0.108   3.222   0.209   0.152   0.110   5.653    2.31   0.083     0.118   0.110   0.131   0.186    0.205
LOW        0.120    0.440   0.105   7.575   0.390   0.195   0.070  11.065   19.32   0.150     0.100   0.220   0.145   0.625    0.365
HIGH       0.275    0.845   0.365  16.250   0.895   0.615   0.380  28.190   25.94   0.360     0.380   0.440   0.540   1.065    0.925


 LOBSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                      194012   AREA- NORTH ATLANTIC      SITE- P2   CLAW & TAIL ME

LENGTH      NUM    3   MEAN         0.357   S. D.       0.091   LOW       0.290   HIGH        0.460
WEIGHT      NUM    3   MEAN         2.202   S. D.       1.635   LOW       1.158   HIGH        4.086
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM       PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0003     0003    0003    0003    0003    0003    0003    0003    0003    0003      0003    0003    0003    0003     0003
N DET.      0000     0000    0000    0000    0000    0000    0000    0000    0000    0000      0002    0002    0000    0000     0000
MEAN       0.243    0.367   0.200  14.888   0.723   0.468   0.237  19.252   21.33   0.292     0.090   0.220   0.457   0.972    0.572
S. D.      0.055    0.154   0.187   9.246   0.216   0.338   0.081   3.293    6.05   0.099     0.000   0.000   0.265   0.222    0.111
LOW        0.190    0.190   0.050   5.300   0.570   0.120   0.190  15.690   17.50   0.180     0.000   0.000   0.200   0.810    0.470
HIGH       0.300    0.470   0.410  23.750   0.970   0.795   0.330  22.185   28.31   0.370     0.090   0.220   0.730   1.225    0.690


 LOBSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                      194012   AREA- NORTH ATLANTIC      SITE- P3   CLAW & TAIL ME

LENGTH      NUM    3   MEAN         0.337   S. D.       0.054   LOW       0.275   HIGH        0.373
WEIGHT      NUM    3   MEAN         1.447   S. D.       0.344   LOW       1.050   HIGH        1.646
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM       PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0003     0003    0003    0003    0002    0003    0003    0003    0003    0003      0003    0003    0003    0003     0003
N DET.      0000     0000    0000    0000    0000    0000    0000    0000    0000    0000      0002    0000    0000    0000     0000
MEAN       0.167    0.690   0.143  13.789   0.765   0.483   0.250  24.240   28.65   0.325     0.440   0.430   0.420   0.877    0.658
S. D.      0.035    0.190   0.031   4.355   0.304   0.038   0.060   8.472    8.02   0.079     0.000   0.180   0.040   0.085    0.093
LOW        0.130    0.500   0.110  10.600   0.550   0.440   0.190  17.500   21.88   0.255     0.000   0.280   0.380   0.780    0.565
HIGH       0.200    0.880   0.170  18.750   0.980   0.510   0.310  33.750   37.50   0.410     0.440   0.630   0.460   0.940    0.750


 LOBSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                      194012   AREA- NORTH ATLANTIC      SITE- R6   LEG MEAT

LENGTH      NUM    2   MEAN         0.773   S. D.       0.039   LOW       0.745   HIGH        0.800
WEIGHT      NUM    2   MEAN         6.719   S. D.       1.284   LOW       5.811   HIGH        7.627
          MERCURY    LEAD  CADMIUM ARSENIC SELENIUM SILVER   CHROM   COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
            PPM       PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM     PPM       PPM     PPM     PPM     PPM       PPM

NUMBER      0002     0002    0002    0001    0001    0002    0002    0002    0002    0002      0002    0002    0002    0002     0002
N DET.      0000     0000    0000    0000    0000    0000    0000    0000    0000    0000      0001    0001    0000    0001     0000
MEAN       0.548    0.908   0.120  20.545   0.615   0.898   0.155  19.328   47.43   0.505     0.140   0.190   0.435   0.890    0.815
S. D.      0.159    0.039   0.028   0.000   0.000   0.173   0.049  11.558    0.77   0.078     0.000   0.000   0.064   0.000    0.262
LOW        0.435    0.880   0.100   0.000   0.000   0.775   0.120  11.155   46.88   0.450     0.000   0.000   0.390   0.000    0.630
HIGH       0.660    0.935   0.140  20.545   0.615   1.020   0.190  27.500   47.97   0.560     0.140   0.190   0.480   0.890    1.000
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                                                  TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                   REPORT   MF17
                                                 IN RESOURCE SURVEY SPECIES;
CATION LEVEL 5                                   BY TISSUE AND LOCATION

STER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                    194012   AREA- NORTH ATLANTIC      SITE- R6   BODY MEAT

TH        NUM     2   MEAN          0.773   S. D.       0.039   LOW       0.745   HIGH          0.800
GHT       NUM     2   MEAN          6.719   S. D.       1.284   LOW       5.811   HIGH          7.627
        MERCURY   LEAD  CADMIUM  ARSENIC  SELENIUM  SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB  VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM      PPM      PPM      PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

ER        0002    0002    0002    0002     0002     0002    0002    0002    0002    0002     0002    0002    0002    0002     0002
T.        0000    0000    0000    0000     0000     0000    0000    0000    0000    0000     0000    0001    0000    0000     0000
          0.338   0.470  10.253  19.071    0.808    0.170   0.503  13.093   30.00   0.443    0.345   0.440   0.670   0.815    0.580
D.        0.081   0.042   6.544  11.095    0.272    0.071   0.180  10.030    2.64   0.166    0.049   0.000   0.269   0.134    0.113
          0.280   0.440   5.625  11.225    0.616    0.120   0.375   6.000   28.13   0.325    0.310   0.000   0.480   0.720    0.500
H         0.395   0.500  14.880  26.916    1.000    0.220   0.630  20.185   31.87   0.560    0.380   0.440   0.860   0.910    0.660

BSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                   194012   AREA- NORTH ATLANTIC      SITE- R6   CLAW MEAT

NGTH      NUM     2   MEAN          0.773   S. D.       0.039   LOW       0.745   HIGH          0.800
IGHT      NUM     2   MEAN          6.719   S. D.       1.284   LOW       5.811   HIGH          7.627
        MERCURY   LEAD  CADMIUM  ARSENIC  SELENIUM  SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB  VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM      PPM      PPM      PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

BER       0002    0002    0002    0002     0002     0002    0002    0002    0002    0002     0002    0002    0002    0002     0002
DET.      0000    0000    0000    0000     0000     0000    0001    0000    0000    0000     0002    0002    0000    0000     0000
AN        0.390   0.630   0.105  13.300    0.595    0.775   0.310  26.255   34.47   0.275    0.000   0.000   0.290   0.830    0.565
D.        0.042   0.354   0.035   5.374    0.262    0.544   0.000   9.723   10.92   0.078    0.000   0.000   0.028   0.820    0.177
          0.360   0.380   0.080   9.500    0.410    0.390   0.000  19.380   26.75   0.220    0.000   0.000   0.270   0.250    0.440
H         0.420   0.880   0.130  17.100    0.780    1.160   0.310  33.130   42.19   0.330    0.000   0.000   0.310   1.410    0.690

OBSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                  194012   AREA- NORTH ATLANTIC      SITE- R6   TAIL MEAT

NGTH      NUM     2   MEAN          0.773   S. D.       0.039   LOW       0.745   HIGH          0.800
GHT       NUM     2   MEAN          6.719   S. D.       1.284   LOW       5.811   HIGH          7.627
        MERCURY   LEAD  CADMIUM  ARSENIC  SELENIUM  SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB  VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM      PPM      PPM      PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

MBER      0002    0002    0002    0002     0002     0002    0002    0002    0002    0002     0002    0002    0002    0002     0002
DET.      0000    0000    0000    0000     0000     0000    0000    0000    0000    0000     0001    0001    0000    0000     0000
AN        1.150   0.583   0.408  14.360    0.923    0.218   0.170   6.248   25.70   0.325    0.250   0.190   0.300   0.720    0.703
D.        0.226   0.067   0.202   4.582    0.315    0.088   0.156   4.685    1.67   0.078    0.000   0.000   0.141   0.311    0.202
W         0.990   0.535   0.265  11.120    0.700    0.155   0.060   2.935   24.52   0.270    0.000   0.000   0.200   0.500    0.560
GH        1.310   0.630   0.550  17.600    1.145    0.280   0.280   9.560   26.88   0.380    0.250   0.190   0.400   0.940    0.845

OBSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                  194012   AREA- NORTH ATLANTIC      SITE- R6   CLAW & TAIL MEAT

NGTH      NUM     1   MEAN          0.643   S. D.       0.000   LOW       0.643   HIGH          0.643
IGHT      NUM     2   MEAN          1.845   S. D.       2.143   LOW       0.330   HIGH          3.360
        MERCURY   LEAD  CADMIUM  ARSENIC  SELENIUM  SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB  VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM      PPM      PPM      PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

MBER      0003    0003    0003    0003     0003     0003    0003    0003    0003    0003     0003    0003    0003    0003     0003
DET.      0000    0000    0000    0000     0000     0000    0000    0000    0000    0000     0001    0001    0000    0000     0000
AN        0.313   0.823   0.150   9.433    0.903    0.777   0.220  16.727   24.26   0.290    0.190   0.625   0.322   0.917    0.745
D.        0.228   0.289   0.038   4.988    0.139    0.200   0.090   9.279    6.48   0.113    0.000   0.177   0.141   0.333    0.218
W         0.135   0.630   0.110   6.410    0.780    0.615   0.130  10.375   18.44   0.220    0.190   0.500   0.170   0.560    0.560
GH        0.570   1.155   0.185  15.190    1.053    1.000   0.310  27.375   31.25   0.420    0.190   0.750   0.450   1.220    0.985

OBSTER, NORTHERN (AMERICAN)    HOMARUS AMERICANUS                  194012   AREA- NORTH ATLANTIC      SITE- R9   CLAW & TAIL MEAT

NGTH      NUM     5   MEAN          0.260   S. D.       0.061   LOW       0.202   HIGH          0.344
IGHT      NUM     5   MEAN          0.836   S. D.       0.432   LOW       0.340   HIGH          1.361
        MERCURY   LEAD  CADMIUM  ARSENIC  SELENIUM  SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB  VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM      PPM      PPM      PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

MBER      0005    0005    0005    0005     0005     0005    0005    0005    0005    0005     0005    0005    0004    0005     0004
DET.      0000    0000    0000    0000     0000     0000    0001    0000    0000    0000     0003    0002    0000    0000     0000
AN        0.263   0.555   0.144  10.657    0.757    0.251   0.141   9.727   19.28   0.236    0.255   0.317   0.263   0.993    0.630
. D.      0.051   0.065   0.059   5.083    0.238    0.123   0.031   3.297    5.35   0.064    0.134   0.419   0.051   0.466    0.225
W         0.220   0.450   0.090   6.483    0.460    0.130   0.120   5.560   10.00   0.170    0.160   0.060   0.190   0.500    0.380
IGH       0.345   0.630   0.235  19.100    1.070    0.430   0.185  14.365   23.11   0.310    0.350   0.800   0.300   1.440    0.840

RAB, BLUE                       CALLINECTES SAPIDUS          .     196001   AREA- NORTH ATLANTIC      SITE- R8   CLAW & BODY MEAT

NGTH      NUM     0   MEAN          0.000   S. D.       0.000   LOW       0.000   HIGH          0.000
EIGHT     NUM     0   MEAN          0.000   S. D.       0.000   LOW       0.000   HIGH          0.000
        MERCURY   LEAD  CADMIUM  ARSENIC  SELENIUM  SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB  VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM      PPM      PPM      PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

UMBER     0010    0010    0010    0010     0010     0010    0010    0010    0010    0009     0010    0010    0010    0010     0010
DET.      0005    0000    0000    0000     0000     0000    0000    0000    0000    0000     0004    0005    0000    0009     0000
EAN       0.037   0.604   0.100   3.048    0.545    0.311   0.238   3.279   29.35   0.396    0.183   0.336   1.846   0.250    0.861
. D.      0.020   0.188   0.012   2.154    0.277    0.068   0.081   1.508    4.85   0.064    0.039   0.240   0.829   0.000    0.208
OW        0.020   0.380   0.075   0.900    0.250    0.195   0.130   1.120   21.00   0.250    0.130   0.160   0.960   0.000    0.690
IGH       0.070   1.020   0.120   7.750    1.210    0.380   0.380   6.380   36.25   0.470    0.230   0.750   3.690   0.250    1.330

RAB, BLUE                       CALLINECTES SAPIDUS                196001   AREA- SOUTH ATLANTIC      SITE- C2   CLAW & BODY MEAT

ENGTH     NUM     0   MEAN          0.000   S. D.       0.000   LOW       0.000   HIGH          0.000
EIGHT     NUM     0   MEAN          0.000   S. D.       0.000   LOW       0.000   HIGH          0.000
        MERCURY   LEAD  CADMIUM  ARSENIC  SELENIUM  SILVER  CHROM   COPPER  ZINC    NICKEL   MOLYB  VANADIUM  MANG  ANTIMONY   TIN
          PPM     PPM     PPM      PPM      PPM      PPM     PPM     PPM    PPM      PPM      PPM     PPM     PPM     PPM      PPM

UMBER     0010    0010    0010    0009     0009     0010    0010    0010    0010    0010     0009    0009    0010    0010     0009
DET.      0000    0000    0000    0000     0000     0000    0001    0000    0000    0000     0001    0002    0000    0001     0000
EAN       0.099   0.755   0.228  10.333    1.326    0.476   0.390  11.471   35.83   0.665    0.284   0.772   3.115   1.670    0.927
. D.      0.027   0.345   0.100   5.914    0.246    0.189   0.124   3.044    8.97   0.269    0.161   0.691   1.077   1.020    0.347
OW        0.050   0.360   0.070   0.300    0.845    0.215   0.180   7.419   22.43   0.320    0.130   0.290   1.360   0.320    0.600
IGH       0.135   1.310   0.420  17.933    1.615    0.770   0.606  14.745   50.00   1.160    0.620   2.300   4.830   3.600    1.665
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

CRAB, BLUE   CALLINECTES SAPIDUS   196001   AREA- SOUTH ATLANTIC   SITE- F3   BODY MEAT

LENGTH   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000
WEIGHT   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0
MEAN	0.413	0.793	0.135	3.581	0.617	0.253	0.123	11.834	30.81	0.369	0.261	0.458	2.008	1.318	0.
S. D.	0.122	0.260	0.017	1.178	0.164	0.106	0.035	3.748	8.28	0.054	0.069	0.203	0.517	0.228	0.31
LOW	0.280	0.470	0.115	2.200	0.385	0.145	0.060	8.565	21.12	0.275	0.190	0.190	1.375	1.125	0.39
HIGH	0.610	1.095	0.155	5.750	0.800	0.435	0.160	19.155	42.97	0.415	0.345	0.750	2.890	1.625	1.31

CRAB, BLUE   CALLINECTES SAPIDUS   196001   AREA- SOUTH ATLANTIC   SITE- F3   CLAW MEAT

LENGTH   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000
WEIGHT   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0000	0001	0001	0001	0001	0001	00
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	000
MEAN	0.500	0.880	0.080	3.625	0.890	0.080	0.730	13.130	0.00	0.570	0.000	0.170	1.430	0.810	0.63
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.0
HIGH	0.500	0.880	0.080	3.625	0.890	0.080	0.730	13.130	0.00	0.570	0.000	0.170	1.430	0.810	0.6

CRAB, BLUE   CALLINECTES SAPIDUS   196001   AREA- SOUTH ATLANTIC   SITE- F3   CLAW & BODY

LENGTH   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000
WEIGHT   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0002	0002	0002	0002	0001	0002	0002	0002	0002	0002	0002	0002	0002	0002	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0002	0000	0000	000
MEAN	0.210	1.095	0.115	4.194	0.290	0.215	0.345	8.905	28.41	0.360	0.060	0.000	1.140	1.250	0.78
S. D.	0.141	0.304	0.021	1.193	0.000	0.106	0.403	2.425	2.16	0.028	0.000	0.000	1.032	0.269	0.0
LOW	0.110	0.880	0.100	3.350	0.000	0.140	0.060	7.190	26.88	0.340	0.000	0.000	0.410	1.060	0.7
HIGH	0.310	1.310	0.130	5.037	0.290	0.290	0.630	10.620	29.94	0.380	0.060	0.000	1.870	1.440	0.8

CRAB, BLUE   CALLINECTES SAPIDUS   196001   AREA- GULF   SITE- B7   BODY MEAT

LENGTH   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000
WEIGHT   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0003	0002	0000	0000	000
MEAN	0.053	0.877	0.103	1.795	0.477	0.120	0.347	4.143	54.06	0.397	0.000	0.220	1.173	0.990	0.90
S. D.	0.025	0.329	0.012	0.474	0.133	0.036	0.345	1.956	54.16	0.156	0.000	0.000	0.391	0.180	0.21
LOW	0.030	0.630	0.090	1.450	0.400	0.090	0.060	2.060	13.75	0.230	0.000	0.000	0.750	0.840	0.75
HIGH	0.080	1.250	0.110	2.335	0.630	0.160	0.730	5.940	115.62	0.540	0.000	0.220	1.520	1.190	1.06

CRAB, BLUE   CALLINECTES SAPIDUS   196001   AREA- GULF   SITE- B8   BODY MEAT

LENGTH   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000
WEIGHT   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0007	0006	0007	0006	0007	0007	0007	0007	0007	0007	0007	0007	0007	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0004	0000	0001	000
MEAN	0.040	0.649	0.098	1.478	0.554	0.116	0.470	4.680	68.79	0.339	0.288	0.217	1.823	0.943	0.89
S. D.	0.028	0.287	0.022	0.632	0.341	0.054	0.440	1.025	49.20	0.067	0.255	0.085	0.602	0.283	0.24
LOW	0.020	0.370	0.070	0.700	0.040	0.020	0.120	3.010	30.62	0.240	0.090	0.120	0.930	0.720	0.62
HIGH	0.090	1.250	0.130	2.625	0.920	0.180	1.250	5.940	160.62	0.440	0.720	0.280	2.810	1.500	1.31

CRAB, BLUE   CALLINECTES SAPIDUS   196001   AREA- GULF   SITE- B8   CLAW MEAT

LENGTH   NUM   1   MEAN   0.148   S. D.   0.000   LOW   0.148   HIGH   0.148
WEIGHT   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	000
MEAN	0.135	0.565	0.085	2.856	0.475	0.305	0.160	6.035	51.25	0.450	0.000	0.000	2.335	0.000	0.52
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.135	0.565	0.085	2.856	0.475	0.305	0.160	6.035	51.25	0.450	0.000	0.000	2.335	0.000	0.52

CRAB, BLUE   CALLINECTES SAPIDUS   196001   AREA- GULF   SITE- B8   CLAW & BODY

LENGTH   NUM   6   MEAN   0.154   S. D.   0.007   LOW   0.148   HIGH   0.166
WEIGHT   NUM   0   MEAN   0.000   S. D.   0.000   LOW   0.000   HIGH   0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	0006	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0005	0005	0000	0006	000
MEAN	0.078	0.555	0.096	2.578	0.539	0.167	0.223	3.690	35.92	0.401	0.130	0.130	3.369	0.000	0.70
S. D.	0.046	0.148	0.023	1.708	0.079	0.072	0.085	1.943	8.91	0.044	0.000	0.000	1.256	0.000	0.14
LOW	0.040	0.380	0.070	1.083	0.410	0.090	0.090	0.380	21.88	0.320	0.000	0.000	1.590	0.000	0.47
HIGH	0.150	0.750	0.125	5.537	0.620	0.290	0.315	5.880	46.88	0.440	0.130	0.130	5.000	0.000	0.84

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                                                 TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                    REPORT   MF17
                                                IN RESOURCE SURVEY SPECIES:
OCATION LEVEL 5                                 BY TISSUE AND LOCATION

AB, BLUE                              CALLINECTES SAPIDUS                    196001    AREA- GULF                     SITE- E5   BODY MEAT

NGTH      NUM   10    MEAN          0.150    S. D.       0.005    LOW       0.143    HIGH          0.157
EIGHT     NUM   10    MEAN          0.174    S. D.       0.016    LOW       0.146    HIGH          0.190
        MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM  MANG  ANTIMONY    TIN
          PPM      PPM      PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM       PPM

MBER      0010     0010     0009    0010     0008    0010    0010     0010    0010     0010      0010    0010    0010    0010      0009
DET.      0000     0000     0000    0000     0000    0000    0000     0000    0000     0000      0005    0006    0000    0001      0000
EAN      0.201    0.557    0.083   5.311    0.943   0.134   0.195    4.521   22.74    0.372     0.168   0.343   0.300   0.867     0.704
. D.     0.053    0.166    0.017   2.815    0.578   0.041   0.053    1.877    5.04    0.219     0.108   0.081   0.068   0.273     0.169
OW       0.150    0.250    0.050   3.000    0.370   0.070   0.120    1.425   12.50    0.040     0.060   0.250   0.220   0.560     0.470
IGH      0.330    0.810    0.105  12.140    1.900   0.200   0.260    7.440   29.25    0.740     0.310   0.440   0.440   1.440     1.000

RAB, BLUE                             CALLINECTES SAPIDUS                    196001    AREA- GULF                     SITE- E5   CLAW & BODY MEAT

ENGTH     NUM   10    MEAN          0.138    S. D.       0.005    LOW       0.133    HIGH          0.149
EIGHT     NUM   10    MEAN          0.151    S. D.       0.017    LOW       0.134    HIGH          0.190
        MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM  MANG  ANTIMONY    TIN
          PPM      PPM      PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM       PPM

MBER      0010     0010     0010    0010     0010    0010    0010     0010    0010     0010      0010    0010    0010    0010      0010
DET.      0000     0000     0000    0000     0000    0000    0000     0000    0000     0000      0005    0002    0000    0008      0000
EAN      0.266    0.709    0.105   6.893    0.780   0.158   0.235    4.624   30.08    0.452     0.166   0.249   0.863   0.345     0.729
. D.     0.075    0.210    0.022   1.550    0.195   0.050   0.113    2.538    7.71    0.183     0.050   0.127   0.398   0.049     0.148
W        0.130    0.380    0.060   3.933    0.410   0.100   0.130    1.290   13.94    0.260     0.090   0.130   0.260   0.310     0.470
GH       0.330    1.000    0.130   9.100    1.060   0.250   0.500    9.440   38.13    0.870     0.220   0.540   1.590   0.380     1.060

CRAB, BLUE                            CALLINECTES SAPIDUS                    196001    AREA- GULF                     SITE- G3   CLAW & BODY MEAT

ENGTH     NUM   2     MEAN          0.151    S. D.       0.008    LOW       0.145    HIGH          0.156
IGHT      NUM   1     MEAN          0.185    S. D.       0.000    LOW       0.185    HIGH          0.185
        MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM  MANG  ANTIMONY    TIN
          PPM      PPM      PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM       PPM

UMBER     0002     0002     0002    0002     0002    0002    0002     0002    0002     0002      0002    0002    0002    0002      0002
DET.      0000     0000     0000    0000     0000    0000    0000     0000    0000     0000      0000    0001    0000    0001      0000
EAN      0.193    0.845    0.100   3.375    0.460   0.238   0.200    3.718   39.53    0.285     0.138   0.280   1.595   0.630     0.628
D.       0.011    0.354    0.028   0.884    0.127   0.216   0.028    0.795    0.23    0.049     0.011   0.000   0.233   0.000     0.110
OW       0.185    0.595    0.080   2.750    0.370   0.085   0.180    3.155   39.37    0.250     0.130   0.000   1.430   0.000     0.550
IGH      0.200    1.095    0.120   4.000    0.550   0.390   0.220    4.280   39.69    0.320     0.145   0.280   1.760   0.630     0.705

CRAB, BLUE                            CALLINECTES SAPIDUS                    196001    AREA- GULF                     SITE- L5   CLAW & BODY MEAT

ENGTH     NUM   3     MEAN          0.139    S. D.       0.008    LOW       0.132    HIGH          0.148
EIGHT     NUM   1     MEAN          0.154    S. D.       0.000    LOW       0.154    HIGH          0.154
        MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM  MANG  ANTIMONY    TIN
          PPM      PPM      PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM       PPM

UMBER     0003     0003     0003    0002     0002    0003    0003     0003    0003     0003      0003    0003    0003    0003      0003
DET.      0000     0000     0000    0000     0000    0000    0000     0000    0000     0000      0000    0001    0000    0001      0000
EAN      0.100    0.782    0.128   9.230    1.022   0.608   0.203   10.168   33.67    0.489     0.212   0.450   0.632   0.845     0.873
. D.     0.044    0.157    0.014   4.011    0.257   0.266   0.071    1.949   11.22    0.313     0.121   0.240   0.257   0.488     0.223
OW       0.070    0.626    0.113   6.393    0.840   0.330   0.155    8.243   24.22    0.140     0.100   0.280   0.376   0.500     0.700
IGH      0.150    0.940    0.140  12.066    1.203   0.860   0.285   12.140   46.07    0.745     0.340   0.620   0.890   1.190     1.125

CRAB, BLUE                            CALLINECTES SAPIDUS                    196001    AREA- GULF                     SITE- L8   BODY MEAT

ENGTH     NUM   0     MEAN          0.000    S. D.       0.000    LOW       0.000    HIGH          0.000
EIGHT     NUM   0     MEAN          0.000    S. D.       0.000    LOW       0.000    HIGH          0.000
        MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM  MANG  ANTIMONY    TIN
          PPM      PPM      PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM       PPM

NUMBER    0009     0009     0008    0008     0007    0009    0009     0009    0009     0008      0009    0009    0008    0009      0009
N DET.    0000     0000     0000    0000     0000    0000    0000     0000    0000     0000      0001    0003    0000    0001      0000
MEAN     0.125    0.924    0.151   2.993    0.675   0.206   0.338    8.641   26.69    0.415     0.228   0.247   0.438   1.348     0.866
S. D.    0.049    0.444    0.044   0.885    0.299   0.032   0.160    1.836   11.86    0.041     0.134   0.133   0.167   0.269     0.213
LOW      0.020    0.360    0.090   2.225    0.250   0.140   0.140    6.380    9.56    0.355     0.060   0.060   0.300   0.970     0.620
HIGH     0.180    1.630    0.230   4.287    1.250   0.250   0.630   11.110   46.25    0.460     0.500   0.440   0.820   1.780     1.250

CRAB, BLUE                            CALLINECTES SAPIDUS                    196001    AREA- GULF                     SITE- L8   CLAW MEAT

LENGTH    NUM   0     MEAN          0.000    S. D.       0.000    LOW       0.000    HIGH          0.000
WEIGHT    NUM   0     MEAN          0.000    S. D.       0.000    LOW       0.000    HIGH          0.000
        MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM  MANG  ANTIMONY    TIN
          PPM      PPM      PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM       PPM

NUMBER    0003     0003     0003    0003     0003    0003    0003     0003    0003     0003      0003    0003    0003    0003      0002
N DET.    0000     0000     0000    0000     0000    0000    0000     0000    0000     0000      0002    0000    0000    0000      0000
MEAN     0.125    0.978    0.152   3.776    0.770   0.185   0.250    8.157   28.26    0.403     0.220   0.537   0.368   1.282     0.938
S. D.    0.048    0.400    0.073   1.795    0.448   0.031   0.295    3.762    9.84    0.087     0.000   0.502   0.156   0.294     0.442
LOW      0.080    0.745    0.085   2.012    0.260   0.150   0.010    5.940   20.63    0.330     0.000   0.090   0.250   1.095     0.625
HIGH     0.175    1.440    0.230   5.600    1.100   0.210   0.580   12.500   39.37    0.500     0.220   1.080   0.545   1.620     1.250

CRAB, BLUE                            CALLINECTES SAPIDUS                    196001    AREA- GULF                     SITE- L8   CLAW & BODY MEAT

LENGTH    NUM   0     MEAN          0.000    S. D.       0.000    LOW       0.000    HIGH          0.000
WEIGHT    NUM   0     MEAN          0.000    S. D.       0.000    LOW       0.000    HIGH          0.000
        MERCURY    LEAD   CADMIUM ARSENIC SELENIUM SILVER   CHROM    COPPER  ZINC    NICKEL     MOLYB VANADIUM  MANG  ANTIMONY    TIN
          PPM      PPM      PPM     PPM      PPM     PPM     PPM      PPM    PPM      PPM        PPM     PPM     PPM     PPM       PPM

NUMBER    0010     0011     0011    0011     0010    0011    0011     0011    0011     0011      0011    0011    0011    0011      0011
N DET.    0000     0000     0000    0000     0000    0000    0000     0000    0000     0000      0003    0005    0000    0001      0000
MEAN     0.147    0.676    0.122   4.902    0.515   0.282   0.235    7.877   31.07    0.329     0.203   0.387   0.371   1.148     0.921
S. D.    0.026    0.291    0.051   2.181    0.519   0.120   0.131    4.491    5.65    0.083     0.185   0.170   0.102   0.300     0.167
LOW      0.120    0.300    0.070   1.516    0.130   0.090   0.090    3.305   21.94    0.230     0.060   0.190   0.270   0.810     0.690
HIGH     0.210    1.440    0.260   9.750    1.960   0.500   0.470   20.000   42.19    0.450     0.630   0.690   0.630   1.690     1.205
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TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

LOCATION LEVEL 5

CRAB, ROCK   CANCER ERRORATUS   196003   AREA- NORTH ATLANTIC   SITE- I4   MEAT

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 0.114 S. D. 0.000 LOW 0.114 HIGH 0.114

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	00
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0000	0000	00
MEAN	0.000	1.000	0.190	7.125	1.900	0.360	0.310	9.840	43.75	0.750	0.000	0.190	1.500	0.130	0.8
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.000	1.000	0.190	7.125	1.900	0.360	0.310	9.840	43.75	0.750	0.000	0.190	1.500	0.130	0.88

CRAB, ROCK   CANCER ERRORATUS   196003   AREA- NORTH ATLANTIC   SITE- N2   MEAT

LENGTH NUM 1 MEAN 0.084 S. D. 0.000 LOW 0.084 HIGH 0.084
WEIGHT NUM 1 MEAN 0.066 S. D. 0.000 LOW 0.066 HIGH 0.066

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	0000	0001	000
MEAN	0.330	0.380	0.140	3.980	0.700	0.130	0.130	4.060	13.75	0.380	0.000	0.000	0.560	0.000	0.41
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.330	0.380	0.140	3.980	0.700	0.130	0.130	4.060	13.75	0.380	0.000	0.000	0.560	0.000	0.41

CRAB, ROCK   CANCER ERRORATUS   196003   AREA- NORTH ATLANTIC   SITE- N4   MEAT

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 0.096 S. D. 0.000 LOW 0.096 HIGH 0.096

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	000
MEAN	0.240	0.630	0.210	10.583	1.600	0.255	0.275	4.660	39.38	0.890	0.160	0.250	1.345	0.000	0.64
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.240	0.630	0.210	10.583	1.600	0.255	0.275	4.660	39.38	0.890	0.160	0.250	1.345	0.000	0.64

CRAB, ROCK   CANCER ERRORATUS   196003   AREA- NORTH ATLANTIC   SITE- N6   MEAT

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 0.165 S. D. 0.000 LOW 0.165 HIGH 0.165

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	000
MEAN	0.140	1.060	0.550	17.525	2.220	0.460	0.310	13.130	51.56	0.690	0.130	0.440	2.940	0.250	0.88
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.140	1.060	0.550	17.525	2.220	0.460	0.310	13.130	51.56	0.690	0.130	0.440	2.940	0.250	0.88

CRAB, ROCK   CANCER ERRORATUS   196003   AREA- NORTH ATLANTIC   SITE- N7   MEAT

LENGTH NUM 1 MEAN 0.080 S. D. 0.000 LOW 0.080 HIGH 0.080
WEIGHT NUM 3 MEAN 0.087 S. D. 0.013 LOW 0.072 HIGH 0.097

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	0003	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0002	0000	0003	000
MEAN	0.215	0.690	0.277	7.539	1.260	0.458	0.253	7.285	33.75	1.145	0.160	0.280	1.323	0.000	0.78
S. D.	0.052	0.226	0.047	1.627	0.481	0.225	0.125	1.253	11.11	0.145	0.000	0.000	0.371	0.000	0.06
LOW	0.155	0.500	0.240	6.550	0.710	0.240	0.130	5.845	21.25	0.980	0.160	0.000	1.030	0.000	0.75
HIGH	0.250	0.940	0.330	9.416	1.600	0.690	0.380	8.130	42.50	1.250	0.160	0.280	1.740	0.000	0.86

CRAB, ROCK   CANCER ERRORATUS   196003   AREA- NORTH ATLANTIC   SITE- O1   MEAT

LENGTH NUM 2 MEAN 0.097 S. D. 0.006 LOW 0.092 HIGH 0.101
WEIGHT NUM 5 MEAN 0.155 S. D. 0.077 LOW 0.086 HIGH 0.285

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	0005	.000
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	0000	0004	000
MEAN	0.169	0.914	0.300	12.058	1.930	0.265	0.286	7.170	40.43	0.708	0.245	0.351	1.067	0.380	0.88
S. D.	0.081	0.111	0.149	4.352	0.293	0.143	0.058	4.059	10.06	0.145	0.076	0.141	0.447	0.000	0.10
LOW	0.050	0.750	0.130	7.625	1.515	0.105	0.190	1.160	29.25	0.500	0.160	0.250	0.550	0.000	0.75
HIGH	0.230	1.060	0.523	19.150	2.250	0.433	0.345	10.463	54.69	0.855	0.355	0.560	1.773	0.380	0.98

CRAB, ROCK   CANCER ERRORATUS   196003   AREA- NORTH ATLANTIC   SITE- O3   MEAT

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 1 MEAN 0.112 S. D. 0.000 LOW 0.112 HIGH 0.112

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TIN PPM
NUMBER	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	0001	000
N DET.	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	000
MEAN	0.100	1.000	0.360	14.650	2.550	1.000	0.380	5.380	68.75	0.970	0.190	0.190	0.710	0.000	1.06
S. D.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
LOW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.000	0.000	0.000	0.000	0.000	0.00
HIGH	0.100	1.000	0.360	14.650	2.550	1.000	0.380	5.380	68.75	0.970	0.190	0.190	0.710	0.000	1.06

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AB, ROCK                  CANCER ERRORATUS                      196003   AREA- NORTH ATLANTIC       SITE- P1    MEAT

GTH     NUM   0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH      0.000
EIGHT   NUM   1   MEAN       0.111   S. D.      0.000   LOW      0.111   HIGH      0.111
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

UBER         0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0001     0000
N           0.055    0.785    0.335    8.300    1.130    0.325    0.205    5.500    54.06    0.875    0.205    0.410    1.320    0.000    0.660
. D.        0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
OW          0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
IGH         0.055    0.785    0.335    8.300    1.130    0.325    0.205    5.500    54.06    0.875    0.205    0.410    1.320    0.000    0.660

RAB, ROCK                 CANCER ERRORATUS                      196003   AREA- NORTH ATLANTIC       SITE- S1    MEAT

ENGTH   NUM   0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH      0.000
EIGHT   NUM   1   MEAN       0.107   S. D.      0.000   LOW      0.107   HIGH      0.107
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

MBER         0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001     0001
DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0001     0000
EAN         0.100    0.750    0.430    8.850    0.890    0.560    0.190    7.750    30.63    1.180    0.160    0.410    1.780    0.000    0.630
. D.        0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
W           0.000    0.000    0.000    0.000    0.000    0.000    0.000    0.000     0.00    0.000    0.000    0.000    0.000    0.000    0.000
GH          0.100    0.750    0.430    8.850    0.890    0.560    0.190    7.750    30.63    1.180    0.160    0.410    1.780    0.000    0.630

CRAB, RED, DEEP SEA       GERYON QUINQUEDENS                    196006   AREA- NORTH ATLANTIC       SITE- 02    MEAT

ENGTH   NUM   0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH      0.000
IGHT    NUM   5   MEAN       0.274   S. D.      0.040   LOW      0.238   HIGH      0.344
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

UMBER        0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005     0005
DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0004     0005     0000     0005     0000
EAN         0.151    0.479    0.114   11.857    2.268    0.194    0.252    6.028    32.40    0.451    0.190    0.000    0.454    0.000    0.778
D.          0.032    0.113    0.023    3.148    0.353    0.054    0.155    2.763     4.48    0.065    0.000    0.000    0.106    0.000    0.228
W           0.100    0.380    0.080    9.175    1.710    0.100    0.130    1.910    27.50    0.380    0.000    0.000    0.360    0.000    0.470
IGH         0.180    0.630    0.135   16.550    2.650    0.230    0.500    9.380    39.06    0.540    0.190    0.000    0.600    0.000    1.090

CRAB, RED, DEEP SEA       GERYON QUINQUEDENS                    196006   AREA- NORTH ATLANTIC       SITE- 04    MEAT

ENGTH   NUM   0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH      0.000
EIGHT   NUM   0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH      0.000
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

UMBER        0020     0019     0020     0020     0020     0019     0019     0020     0020     0019     0020     0020     0020     0020     0020
DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0010     0006     0000     0017     0000
EAN         0.187    0.595    0.146    9.635    1.615    0.171    0.191    6.502    27.50    0.523    0.204    0.276    0.392    0.260    0.702
. D.        0.088    0.154    0.039    5.070    0.731    0.092    0.086    5.331     7.64    0.227    0.062    0.126    0.223    0.046    0.153
OW          0.040    0.315    0.100    2.650    0.750    0.050    0.060    1.060    11.44    0.280    0.130    0.100    0.180    0.220    0.410
IGH         0.300    0.880    0.260   21.750    3.800    0.470    0.425   25.000    40.63    1.130    0.340    0.600    1.185    0.310    0.940

CRAB, DUNGENESS           CANCER MAGISTER                       196011   AREA- CALIFORNIA           SITE- B2    MEAT

ENGTH   NUM  10   MEAN       0.190   S. D.      0.000   LOW      0.190   HIGH      0.190
EIGHT   NUM  10   MEAN       0.980   S. D.      0.000   LOW      0.980   HIGH      0.980
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

UMBER        0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0010     0009
DET.         0000     0000     0000     0000     0000     0000     0000     0000     0000     0000     0004     0005     0000     0000     0000
EAN         0.094    0.588    0.098    3.123    0.460    0.126    0.172    8.391    39.31    0.273    0.199    0.730    1.030    0.878    1.089
S. D.       0.036    0.236    0.022    1.715    0.228    0.025    0.060    2.730    14.92    0.039    0.095    0.561    0.327    0.253    0.280
LOW         0.040    0.190    0.070    1.387    0.050    0.070    0.060    4.620    17.88    0.190    0.120    0.090    0.530    0.360    0.560
IGH         0.160    0.940    0.130    6.775    0.745    0.155    0.250   14.380    71.88    0.320    0.380    1.380    1.510    1.220    1.500

CRAB, DUNGENESS           CANCER MAGISTER                       196011   AREA- PACIFIC NORTHWEST   SITE- I7    CLAW & BODY MEAT

LENGTH  NUM   0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH      0.000
WEIGHT  NUM   0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH      0.000
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER       0008     0008     0008     0006     0007     0007     0008     0008     0008     0007     0008     0008     0008     0008     0007
N DET.       0000     0000     0002     0000     0000     0000     0000     0000     0000     0001     0003     0004     0000     0003     0000
MEAN        0.111    0.750    0.114    6.514    0.931    0.421    0.231   12.852    33.88    0.394    0.126    0.276    1.125    0.902    0.723
S. D.       0.017    0.398    0.068    2.561    0.170    0.076    0.127    2.402     8.47    0.089    0.060    0.150    0.252    0.325    0.363
LOW         0.080    0.100    0.040    4.560    0.590    0.345    0.050    8.680    25.36    0.280    0.070    0.130    0.710    0.480    0.100
HIGH        0.140    1.500    0.210   11.500    1.090    0.540    0.393   15.710    51.73    0.535    0.220    0.475    1.390    1.296    1.150

CRAB, DUNGENESS           CANCER MAGISTER                       196011   AREA- PACIFIC NORTHWEST   SITE- M5    MEAT

LENGTH  NUM   3   MEAN       0.133   S. D.      0.000   LOW      0.133   HIGH      0.133
WEIGHT  NUM   0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH      0.000
          MERCURY     LEAD  CADMIUM  ARSENIC SELENIUM   SILVER    CHROM   COPPER     ZINC   NICKEL    MOLYB VANADIUM     MANG ANTIMONY      TIN
              PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM      PPM

NUMBER       0020     0020     0020     0017     0016     0020     0020     0020     0018     0020     0020     0020     0020     0020     0020
N DET.       0000     0000     0000     0000     0000     0002     0002     0000     0000     0001     0011     0012     0000     0004     0000
MEAN        0.282    0.745    0.137    6.776    0.571    0.125    0.230    5.576    52.03    0.710    0.294    0.471    0.688    1.070    0.797
S. D.       0.076    0.282    0.052    4.724    0.201    0.055    0.105    1.549     9.16    0.409    0.257    0.202    0.675    0.597    0.387
LOW         0.170    0.355    0.065    1.847    0.290    0.040    0.100    2.480    33.28    0.150    0.060    0.150    0.110    0.300    0.350
HIGH        0.475    1.375    0.245   21.140    0.960    0.270    0.440    9.110    66.60    1.780    0.870    0.870    2.450    2.530    1.500
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                                   TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS
                                  IN RESOURCE SURVEY SPECIES;
LOCATION LEVEL 5                  BY TISSUE AND LOCATION


CRAB, DUNGENESS                CANCER MAGISTER                    196011   AREA- PACIFIC NORTHWEST   SITE- N1   MEAT

LENGTH      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
WEIGHT      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM

NUMBER      0002    0002    0002    0002    0002    0002    0002     0002    0002    0002     0002    0002    0002    0002
N DET.      0000    0001    0000    0000    0000    0000    0000     0000    0000    0001     0002    0002    0000    0000
MEAN       0.375   0.150   0.175   4.682   1.260   0.325   0.135    5.815   48.96   0.240    0.000   0.000   0.780   1.030
S. D.      0.064   0.000   0.035   3.208   0.467   0.163   0.078    0.686   14.57   0.000    0.000   0.000   0.156   0.113
LOW        0.330   0.000   0.150   2.413   0.930   0.210   0.080    5.330   38.65   0.000    0.000   0.000   0.670   0.950
HIGH       0.420   0.150   0.200   6.950   1.590   0.440   0.190    6.300   59.26   0.240    0.000   0.000   0.890   1.110


CRAB, DUNGENESS                CANCER MAGISTER                    196011   AREA- ALASKA                SITE- 08   MEAT

LENGTH      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
WEIGHT      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM

NUMBER      0010    0009    0010    0010    0010    0010    0009     0010    0010    0010     0010    0010    0010    0010
N DET.      0000    0000    0000    0000    0000    0000    0000     0000    0000    0000     0008    0005    0000    0000
MEAN       0.052   0.553   0.098   5.640   0.649   0.202   0.136    4.357   54.61   0.365    0.170   0.264   0.241   0.980
S. D.      0.028   0.162   0.023   2.151   0.175   0.059   0.050    1.439   11.74   0.063    0.156   0.115   0.067   0.228
LOW        0.020   0.345   0.060   3.600   0.430   0.110   0.060    1.680   41.41   0.250    0.060   0.120   0.130   0.720
HIGH       0.110   0.880   0.140   8.562   0.920   0.320   0.195    7.060   78.12   0.450    0.280   0.380   0.350   1.530


CRAB, KING                     PARALITHODES CAMSCHATICA           196012   AREA- ALASKA                SITE- L4   MEAT

LENGTH      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
WEIGHT      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM

NUMBER      0009    0010    0010    0010    0010    0010    0010     0010    0010    0010     0010    0010    0010    0010
N DET.      0003    0000    0000    0000    0000    0000    0000     0000    0000    0000     0001    0003    0000    0000
MEAN       0.038   0.825   0.226   4.330   0.399   0.095   0.280   14.370   57.45   0.408    0.188   0.450   0.429   1.413
S. D.      0.012   0.344   0.068   0.935   0.116   0.038   0.123    7.371   31.82   0.159    0.071   0.204   0.122   0.368
LOW        0.020   0.060   0.160   2.330   0.215   0.060   0.060    5.905   27.50   0.080    0.090   0.190   0.190   0.940
HIGH       0.050   1.315   0.380   5.386   0.570   0.160   0.500   25.310  118.70   0.655    0.340   0.690   0.650   2.250


CRAB, KING                     PARALITHODES CAMSCHATICA           196012   AREA- ALASKA                SITE- N6   CLAW & BO

LENGTH      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
WEIGHT      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM

NUMBER      0009    0008    0009    0009    0009    0009    0009     0009    0009    0009     0009    0009    0009    0009
N DET.      0000    0000    0000    0000    0000    0000    0001     0000    0000    0000     0006    0006    0000    0000
MEAN       0.128   0.461   0.242   5.771   0.443   0.052   0.114    6.116   65.91   0.309    0.123   0.227   0.372   0.803
S. D.      0.070   0.125   0.045   2.731   0.116   0.009   0.046    1.867   27.67   0.068    0.058   0.119   0.103   0.112
LOW        0.050   0.375   0.175   3.225   0.340   0.040   0.060    4.380   39.69   0.190    0.090   0.130   0.190   0.643
HIGH       0.240   0.750   0.310  11.000   0.730   0.065   0.190    9.560  128.12   0.410    0.190   0.360   0.516   1.060


CRAB, KING                     PARALITHODES CAMSCHATICA           196012   AREA- ALASKA                SITE- P3   MEAT

LENGTH      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
WEIGHT      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM

NUMBER      0010    0010    0010    0010    0010    0010    0010     0009    0010    0010     0010    0010    0010    0010
N DET.      0000    0000    0000    0000    0000    0000    0000     0000    0000    0000     0002    0004    0000    0000
MEAN       0.108   0.586   0.157   4.528   0.368   0.095   0.268    6.988   55.64   0.287    0.153   0.355   0.226   0.872
S. D.      0.018   0.209   0.065   1.463   0.191   0.037   0.146    2.617   25.40   0.110    0.050   0.311   0.035   0.209
LOW        0.080   0.250   0.010   2.475   0.100   0.040   0.105    3.380   30.63   0.110    0.090   0.060   0.175   0.535
HIGH       0.130   0.845   0.270   6.573   0.650   0.165   0.560   11.880  108.70   0.500    0.250   0.810   0.285   1.130


CRAB, TANNER (BAIRDI)          CHIONECETES BAIRDI                 196035   AREA- ALASKA                SITE- H7   MEAT

LENGTH      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
WEIGHT      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM

NUMBER      0010    0008    0009    0010    0010    0010    0010     0010    0010    0010     0010    0010    0010    0010
N DET.      0000    0000    0000    0000    0000    0003    0001     0000    0000    0000     0009    0010    0000    0000
MEAN       0.190   0.361   0.299  20.912   0.889   0.039   0.203    2.621   34.32   0.168    0.240   0.000   0.306   0.668
S. D.      0.117   0.098   0.079  11.727   0.223   0.012   0.149    0.564    6.94   0.047    0.000   0.000   0.060   0.161
LOW        0.060   0.210   0.240  10.625   0.520   0.030   0.060    1.440   19.38   0.100    0.000   0.000   0.210   0.470
HIGH       0.380   0.440   0.500  41.250   1.260   0.060   0.500    3.260   42.50   0.220    0.240   0.000   0.380   0.940


CRAB, TANNER (BAIRDI)          CHIONECETES BAIRDI                 196035   AREA- ALASKA                SITE- K3   MEAT

LENGTH      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
WEIGHT      NUM    0   MEAN       0.000   S. D.      0.000   LOW      0.000   HIGH       0.000
          MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY
            PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM     PPM     PPM

NUMBER      0009    0010    0010    0010    0010    0010    0010     0010    0010    0010     0010    0010    0010    0010
N DET.      0001    0000    0000    0000    0000    0000    0000     0000    0000    0000     0007    0005    0000    0000
MEAN       0.055   0.462   0.155   7.204   0.787   0.122   0.123    6.622   30.12   0.269    0.093   0.284   0.557   0.694
S. D.      0.041   0.094   0.029   2.190   0.197   0.034   0.062    1.337    2.86   0.063    0.058   0.179   0.126   0.125
LOW        0.020   0.345   0.105   3.820   0.480   0.080   0.060    4.850   25.63   0.190    0.060   0.190   0.320   0.610
HIGH       0.150   0.630   0.203  10.040   1.090   0.200   0.250    8.940   35.00   0.390    0.160   0.600   0.765   1.000
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                                   TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                               REPORT   MF17
                                  IN RESOURCE SURVEY SPECIES:
OCATION LEVEL 5                   BY TISSUE AND LOCATION


RAB, TANNER (BAIRDI)           CHIONECETES BAIRDI                196035   AREA- ALASKA                SITE- 04   MEAT

NGTH      NUM    0   MEAN        0.000   S. D.       0.000   LOW      0.000   HIGH          0.000
IGHT      NUM    0   MEAN        0.000   S. D.       0.000   LOW      0.000   HIGH          0.000
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

MBER     0010    0007    0009    0010    0010    0010    0010     0010   0010     0010      0010    0010    0010    0010      0007
DET.     0005    0000    0000    0000    0000    0000    0000     0000   0000     0000      0008    0005    0000    0000      0000
AN       0.208   0.477   0.271   8.585   0.619   0.184   0.168    8.290  39.14    0.317     0.170   0.314   0.527   0.931     0.906
. D.     0.084   0.193   0.093   4.847   0.216   0.061   0.111    6.862   2.76    0.122     0.014   0.097   0.416   0.303     0.278
OW       0.100   0.280   0.140   3.333   0.265   0.090   0.060    3.285  33.75    0.170     0.160   0.190   0.190   0.560     0.630
IGH      0.320   0.790   0.420  19.900   0.800   0.310   0.440   25.000  43.59    0.565     0.180   0.440   1.460   1.500     1.310


RAB, TANNER (BAIRDI)           CHIONECETES BAIRDI                196035   AREA- ALASKA                SITE- 07   MEAT

ENGTH     NUM    0   MEAN        0.000   S. D.       0.000   LOW      0.000   HIGH          0.000
EIGHT     NUM    0   MEAN        0.000   S. D.       0.000   LOW      0.000   HIGH          0.000
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

MBER     0010    0008    0010    0010    0010    0010    0009     0010   0010     0010      0010    0010    0010    0010      0010
DET.     0005    0000    0000    0000    0000    0000    0000     0000   0000     0000      0008    0008    0000    0000      0000
MEAN     0.152   0.475   0.230   5.484   0.419   0.180   0.149    4.160  32.82    0.365     0.130   0.250   0.186   1.036     0.546
. D.     0.122   0.177   0.061   2.123   0.154   0.069   0.072    1.174   7.06    0.161     0.000   0.085   0.043   0.253     0.104
OW       0.020   0.310   0.150   2.825   0.190   0.090   0.060    2.160  16.88    0.130     0.130   0.190   0.110   0.630     0.310
IGH      0.270   0.880   0.320  10.150   0.710   0.340   0.320    6.520  43.75    0.650     0.130   0.310   0.240   1.560     0.660


CRAB, TANNER (BAIRDI)          CHIONECETES BAIRDI                196035   AREA- ALASKA                SITE- Q5   MEAT

ENGTH     NUM    0   MEAN        0.000   S. D.       0.000   LOW      0.000   HIGH          0.000
EIGHT     NUM    0   MEAN        0.000   S. D.       0.000   LOW      0.000   HIGH          0.000
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER   0010    0008    0010    0010    0010    0010    0008     0010   0010     0010      0010    0010    0010    0009      0008
N DET.   0003    0000    0000    0000    0000    0001    0001     0000   0000     0000      0010    0009    0000    0000      0000
EAN      0.126   0.481   0.140   9.078   0.705   0.042   0.114    1.557  24.83    0.136     0.000   0.430   0.227   0.501     0.619
. D.     0.103   0.216   0.029   5.212   0.278   0.019   0.046    0.220   6.76    0.048     0.000   0.000   0.071   0.169     0.236
OW       0.020   0.250   0.090   3.100   0.330   0.010   0.060    1.210  12.06    0.060     0.000   0.000   0.140   0.190     0.380
IGH      0.290   0.810   0.190  16.950   1.170   0.070   0.190    2.000  35.94    0.200     0.000   0.430   0.340   0.830     1.130


LADYFISH                       ELOPS SAURUS                      200002   AREA- GULF                  SITE- D5   MUSCLE

ENGTH     NUM    2   MEAN        0.406   S. D.       0.000   LOW      0.406   HIGH          0.406
EIGHT     NUM    2   MEAN        0.908   S. D.       0.000   LOW      0.908   HIGH          0.908
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER   0002    0002    0002    0001    0001    0002    0002     0002   0002     0002      0002    0002    0002    0002      0002
DET.     0000    0000    0001    0000    0000    0001    0000     0000   0000     0000      0002    0002    0000    0000      0000
EAN      1.180   0.330   0.160   8.666   0.993   0.035   0.433    0.644  13.98    0.632     0.000   0.000   0.225   0.323     0.252
S. D.    0.339   0.255   0.000   0.000   0.000   0.000   0.067    0.221   8.99    0.054     0.000   0.000   0.035   0.103     0.059
LOW      0.940   0.150   0.000   0.000   0.000   0.000   0.385    0.487   7.62    0.593     0.000   0.000   0.200   0.250     0.210
HIGH     1.420   0.510   0.160   8.666   0.993   0.035   0.480    0.800  20.33    0.570     0.000   0.000   0.250   0.396     0.293


TARPON                         MEGALOPS ATLANTICA                200003   AREA- GULF                  SITE- L5   MUSCLE

ENGTH     NUM    3   MEAN        1.441   S. D.       0.201   LOW      1.250   HIGH          1.650
WEIGHT    NUM    3   MEAN       26.502   S. D.       8.687   LOW     16.500   HIGH         32.163
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER   0003    0003    0003    0003    0003    0003    0003     0003   0003     0003      0003    0003    0003    0003      0003
N DET.   0000    0000    0001    0000    0000    0003    0000     0000   0000     0000      0003    0002    0000    0001      0000
MEAN     1.533   0.449   0.095  11.423   0.507   0.000   0.236    0.380  12.79    0.293     0.000   0.450   0.165   0.445     0.530
S. D.    0.480   0.128   0.035   6.197   0.307   0.000   0.135    0.147   3.37    0.161     0.000   0.000   0.074   0.346     0.108
LOW      0.980   0.303   0.070   6.270   0.180   0.000   0.092    0.210   9.10    0.110     0.000   0.000   0.085   0.200     0.440
HIGH     1.840   0.543   0.120  18.300   0.790   0.000   0.360    0.470  15.71    0.410     0.000   0.450   0.230   0.690     0.650


TARPON                         MEGALOPS ATLANTICA                200003   AREA- GULF                  SITE- L5   LIVER

LENGTH    NUM    2   MEAN        1.535   S. D.       0.163   LOW      1.420   HIGH          1.650
WEIGHT    NUM    2   MEAN       31.504   S. D.       0.933   LOW     30.844   HIGH         32.163
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER   0002    0002    0002    0002    0002    0002    0002     0002   0002     0002      0002    0002    0002    0002      0002
N DET.   0000    0000    0000    0000    0000    0000    0000     0000   0000     0001      0001    0000    0000    0001      0000
MEAN    12.950   0.620   8.675  26.698   3.815   0.360   0.275   64.405 165.25    2.060     0.310   1.205   0.790   0.690     0.725
S. D.    9.263   0.170   9.412  25.353   1.237   0.438   0.035   19.848 113.22    0.000     0.000   0.559   0.226   0.000     0.035
LOW      6.400   0.500   2.020   8.770   2.940   0.050   0.250   50.370  85.19    0.000     0.000   0.810   0.630   0.000     0.700
HIGH    19.500   0.740  15.330  44.625   4.690   0.670   0.300   78.440 245.31    2.060     0.310   1.600   0.950   0.690     0.750


TARPON                         MEGALOPS ATLANTICA                200003   AREA- GULF                  SITE- L9   MUSCLE

LENGTH    NUM    0   MEAN        0.000   S. D.       0.000   LOW      0.000   HIGH          0.000
WEIGHT    NUM    0   MEAN        0.000   S. D.       0.000   LOW      0.000   HIGH          0.000
       MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY    TIN
         PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM     PPM     PPM     PPM       PPM

NUMBER   0009    0009    0009    0009    0009    0009    0009     0009   0009     0009      0009    0009    0009    0008      0009
N DET.   0000    0000    0000    0000    0000    0000    0000     0000   0000     0000      0006    0005    0000    0001      0000
MEAN     0.930   0.559   0.079  29.336   0.618   0.025   0.246    0.237   7.80    0.204     0.147   0.305   0.097   0.875     0.545
S. D.    0.183   0.271   0.048  25.596   0.388   0.011   0.151    0.142   2.11    0.057     0.075   0.103   0.026   0.205     0.157
LOW      0.640   0.250   0.030   5.100   0.180   0.010   0.090    0.060   3.94    0.140     0.060   0.190   0.060   0.500     0.340
HIGH     1.150   1.060   0.190  73.375   1.295   0.040   0.585    0.500  11.06    0.310     0.190   0.440   0.130   1.095     0.870
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LOCATION LEVEL 5

TABLE 5. SUMMARY OF TRACE ELEMENT LEVELS IN RESOURCE SURVEY SPECIES; BY TISSUE AND LOCATION

OCTOPUS (MARMURATUS) POLYPUS MARMURATUS 205001 AREA- HAWAII SITE- D6 WHOLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 4 MEAN 0.929 S. D. 0.122 LOW 0.765 HIGH 1.021

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	0004	00
N DET.	0001	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0001	00
MEAN	0.023	0.645	0.688	16.563	0.716	0.381	0.119	15.903	14.53	0.463	0.226	0.135	0.444	1.010	0.8
S. D.	0.006	0.072	0.392	9.721	0.330	0.249	0.013	3.307	3.26	0.124	0.083	0.070	0.131	0.153	0.1
LOW	0.020	0.595	0.250	3.276	0.350	0.210	0.105	11.000	11.62	0.365	0.145	0.060	0.365	0.905	0.7
HIGH	0.030	0.750	1.200	26.500	1.075	0.750	0.130	18.210	18.93	0.640	0.340	0.200	0.640	1.185	1.0

OCTOPUS (MARMURATUS) POLYPUS MARMURATUS 205001 AREA- HAWAII SITE- D6 MANTLE, SKI

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 35 MEAN 2.094 S. D. 0.574 LOW 1.362 HIGH 3.260

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0036	0035	0035	0034	0036	0036	0036	0036	0035	0036	0036	0036	0035	0036	00
N DET.	0017	0000	0000	0000	0000	0000	0001	0000	0000	0000	0029	0031	0000	0004	00
MEAN	0.058	0.604	0.308	17.195	0.403	0.154	0.166	9.051	14.01	0.340	0.564	0.592	0.282	0.898	0.8
S. D.	0.056	0.418	0.504	10.270	0.242	0.235	0.093	14.335	4.54	0.205	0.347	0.204	0.142	0.295	0.3
LOW	0.020	0.130	0.030	1.540	0.030	0.030	0.030	0.210	5.60	0.130	0.130	0.330	0.140	0.250	0.4
HIGH	0.250	2.100	1.810	38.250	1.000	0.980	0.380	78.130	34.38	1.170	1.060	0.810	0.690	1.630	2.0

MILKFISH CHANOS CHANOS 206001 AREA- HAWAII SITE- D6 MUSCLE

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 40 MEAN 6.345 S. D. 1.694 LOW 2.722 HIGH 13.608

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0040	0040	0040	0040	0040	0040	0040	0040	0039	0040	0040	0040	0040	0039	00
N DET.	0014	0001	0003	0000	0000	0016	0001	0000	0000	0001	0036	0033	0000	0004	00
MEAN	0.071	0.487	0.069	2.942	0.564	0.029	0.197	0.334	8.17	0.172	0.424	0.226	0.153	0.615	0.7
S. D.	0.050	0.307	0.024	1.522	0.271	0.009	0.141	0.145	2.55	0.060	0.467	0.096	0.035	0.256	1.3
LOW	0.020	0.120	0.030	0.350	0.060	0.010	0.060	0.070	0.44	0.070	0.130	0.120	0.090	0.050	0.1
HIGH	0.200	1.630	0.140	6.635	1.190	0.040	0.565	0.750	14.28	0.375	1.120	0.370	0.250	1.370	9.0

CLAM, SOFT MYA ARENARIA 242001 AREA- NORTH ATLANTIC SITE- M8 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0019	0019	0019	0019	0019	0019	0018	0019	0019	0019	0019	0019	0019	0019	00
N DET.	0011	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0000	0019	00
MEAN	0.086	0.590	0.226	2.015	0.895	0.053	0.265	4.227	15.36	0.560	0.280	0.454	6.448	0.000	0.5
S. D.	0.116	0.158	0.033	1.245	0.322	0.032	0.074	1.071	1.60	0.128	0.083	0.131	1.520	0.000	0.1
LOW	0.020	0.370	0.180	0.430	0.130	0.020	0.130	2.393	10.92	0.410	0.120	0.250	4.190	0.000	0.2
HIGH	0.360	0.940	0.290	5.000	1.800	0.140	0.405	5.875	17.50	0.880	0.410	0.750	9.250	0.000	0.7

CLAM, RAZOR SILIQUA PATULA 243002 AREA- PACIFIC NORTHWEST SITE- M2 SHUCKED

LENGTH NUM 10 MEAN 0.076 S. D. 0.000 LOW 0.076 HIGH 0.076
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0010	0010	0010	0010	0010	0010	0010	0010	0009	0010	0010	0010	0010	0010	00
N DET.	0005	0000	0000	0000	0000	0004	0000	0000	0000	0001	0006	0002	0000	0002	00
MEAN	0.042	0.530	0.094	2.027	0.536	0.050	0.240	0.552	20.07	0.511	0.298	0.343	2.533	0.876	1.4
S. D.	0.033	0.314	0.041	1.052	0.279	0.015	0.085	0.111	4.85	0.174	0.382	0.125	0.988	0.333	0.7
LOW	0.020	0.190	0.040	0.383	0.235	0.030	0.140	0.410	13.75	0.300	0.080	0.120	0.990	0.360	0.9
HIGH	0.100	1.085	0.180	4.350	1.260	0.070	0.390	0.695	26.92	0.750	0.870	0.490	3.890	1.365	3.3

CLAM, RAZOR SILIQUA PATULA 243002 AREA- PACIFIC NORTHWEST SITE- M6 SHUCKED

LENGTH NUM 10 MEAN 0.089 S. D. 0.000 LOW 0.089 HIGH 0.089
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0010	0010	0010	0009	0009	0010	0010	0010	0010	0010	0010	0010	0010	0010	00
N DET.	0005	0000	0002	0000	0000	0003	0000	0000	0000	0001	0007	0000	0000	0004	00
MEAN	0.046	0.529	0.120	4.038	0.432	0.055	0.262	1.035	11.06	0.554	0.410	0.709	2.808	0.976	1.3
S. D.	0.042	0.285	0.071	1.885	0.099	0.026	0.137	0.148	1.95	0.162	0.404	0.248	0.578	0.368	1.0
LOW	0.020	0.250	0.030	1.600	0.225	0.030	0.106	0.860	8.57	0.360	0.110	0.295	2.125	0.450	0.4
HIGH	0.120	1.186	0.250	7.016	0.530	0.090	0.540	1.370	15.71	0.890	0.870	1.015	3.790	1.500	3.7

CLAM, RAZOR SILIQUA PATULA 243002 AREA- ALASKA SITE- H7 SHUCKED

LENGTH NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000
WEIGHT NUM 0 MEAN 0.000 S. D. 0.000 LOW 0.000 HIGH 0.000

	MERCURY PPM	LEAD PPM	CADMIUM PPM	ARSENIC PPM	SELENIUM PPM	SILVER PPM	CHROM PPM	COPPER PPM	ZINC PPM	NICKEL PPM	MOLYB PPM	VANADIUM PPM	MANG PPM	ANTIMONY PPM	TI PP
NUMBER	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	0011	00
N DET.	0008	0000	0000	0000	0000	0000	0000	0000	0000	0000	0004	0000	0000	0000	00
MEAN	0.083	0.767	0.165	2.349	0.449	0.103	0.400	0.896	11.05	0.469	0.181	0.950	2.409	1.125	2.0
S. D.	0.057	0.215	0.042	0.743	0.151	0.036	0.181	0.346	2.07	0.103	0.081	0.430	1.362	0.272	1.2
LOW	0.020	0.440	0.090	1.400	0.230	0.055	0.210	0.495	8.81	0.350	0.060	0.310	0.855	0.750	0.2
HIGH	0.130	1.120	0.240	4.247	0.720	0.160	0.750	1.370	15.00	0.710	0.310	1.780	5.985	1.690	3.8

```
                                                TABLE 5.  SUMMARY OF TRACE ELEMENT LEVELS                                  REPORT   MF17
                                                IN RESOURCE SURVEY SPECIES:
LOCATION LEVEL 5                                BY TISSUE AND LOCATION

 AM, RAZOR                        SILIQUA PATULA                          243002   AREA- ALASKA               SITE- U8    SHUCKED

  STH       NUM    8   MEAN          0.127   S. D.        0.000   LOW       0.127   HIGH          0.127
 EIGHT      NUM    0   MEAN          0.000   S. D.        0.000   LOW       0.000   HIGH          0.000
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

  BER       0008    0007    0008    0008    0008    0008    0008     0008    0008    0008      0008    0008    0008    0008     0008
  ET.       0004    0000    0000    0000    0000    0001    0000     0000    0000    0000      0003    0000    0000    0001     0000
  EAN      0.035   0.335   0.102   2.806   0.353   0.072   0.286    0.459   15.90   0.416     0.240   0.381   1.305   1.095    0.599
 . D.      0.013   0.077   0.042   1.311   0.156   0.028   0.212    0.113    4.05   0.185     0.273   0.198   0.293   0.535    0.215
  OW       0.020   0.210   0.040   0.970   0.140   0.040   0.060    0.320   11.82   0.195     0.060   0.090   0.890   0.500    0.300
   H       0.050   0.405   0.170   4.400   0.500   0.110   0.760    0.670   24.64   0.790     0.720   0.680   1.660   2.000    0.940

 AM, SURF                         SPISULA SOLIDISSIMA                     244005   AREA- NORTH ATLANTIC       SITE- H9    SHUCKED, WHOLE

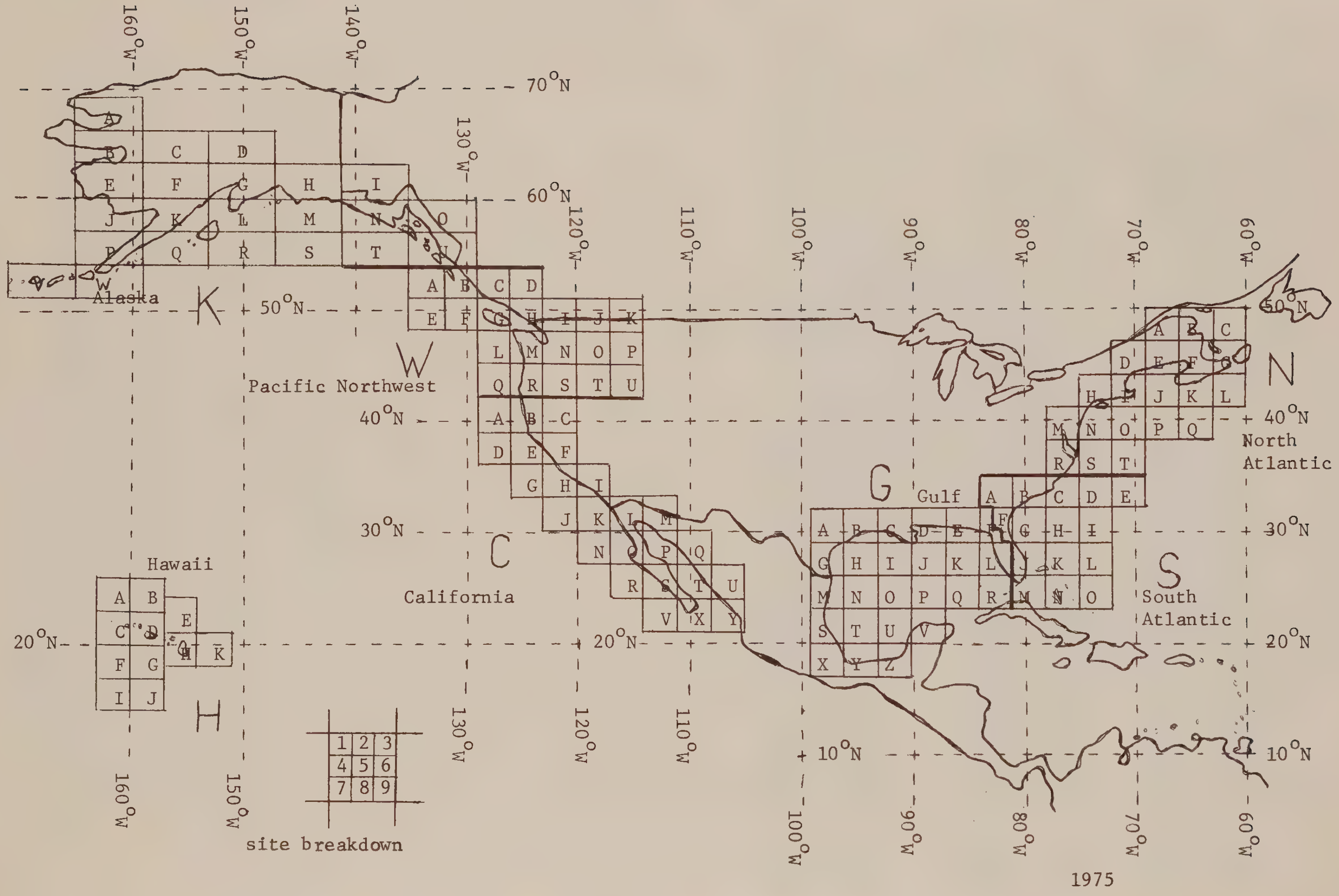
 ENGTH      NUM    0   MEAN          0.000   S. D.        0.000   LOW       0.000   HIGH          0.000
 EIGHT      NUM    0   MEAN          0.000   S. D.        0.000   LOW       0.000   HIGH          0.000
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

  BER       0004    0004    0004    0004    0004    0004    0004     0004    0004    0004      0004    0004    0004    0004     0004
 DET.       0001    0000    0000    0000    0000    0000    0000     0000    0000    0000      0000    0000    0000    0004     0000
 EAN       0.037   1.096   0.110   3.963   0.705   0.088   0.641    2.457   16.44   1.091     0.625   0.721   3.762   0.000    0.474
 . D.      0.015   0.158   0.008   1.609   0.027   0.005   0.095    0.759    1.62   0.069     0.135   0.206   0.702   0.000    0.052
           0.020   0.875   0.100   2.200   0.676   0.080   0.505    1.565   15.27   1.040     0.470   0.550   2.990   0.000    0.410
  GH       0.050   1.250   0.120   6.090   0.740   0.090   0.720    3.310   18.75   1.190     0.775   1.000   4.380   0.000    0.530

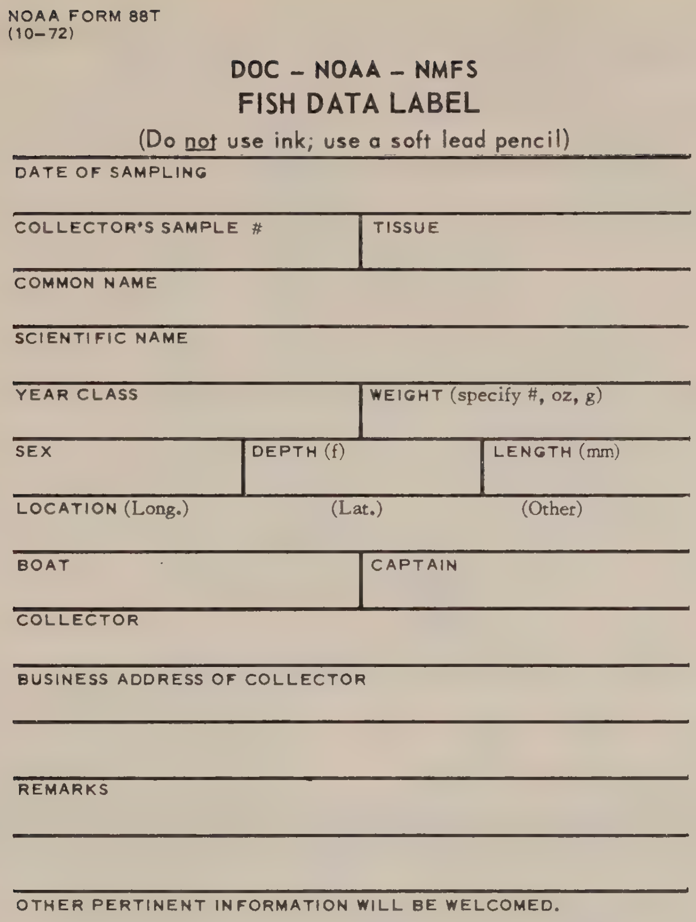
 CLAM, SURF                       SPISULA SOLIDISSIMA                     244005   AREA- NORTH ATLANTIC       SITE- R3    SHUCKED, WHOLE

 ENGTH      NUM    0   MEAN          0.000   S. D.        0.000   LOW       0.000   HIGH          0.000
  IGHT      NUM    0   MEAN          0.000   S. D.        0.000   LOW       0.000   HIGH          0.000
           MERCURY   LEAD  CADMIUM ARSENIC SELENIUM SILVER  CHROM    COPPER  ZINC    NICKEL    MOLYB VANADIUM  MANG  ANTIMONY   TIN
             PPM     PPM     PPM     PPM     PPM     PPM     PPM      PPM    PPM      PPM       PPM    PPM      PPM     PPM      PPM

 NUMBER     0019    0018    0019    0019    0019    0019    0019     0019    0019    0019      0019    0019    0019    0019     0Q19
 N DET.     0009    0000    0000    0000    0000    0000    0000     0000    0000    0000      0000    0015    0000    0019     0000
   AN      0.070   0.398   0.099   1.758   0.324   0.043   0.262    0.285   11.97   0.392     0.255   0.193   0.604   0.000    0.387
    D.     0.039   0.156   0.094   1.147   0.174   0.015   0.099    0.126    1.66   0.065     0.075   0.021   0.321   0.000    0.091
    W      0.020   0.190   0.050   0.680   0.010   0.010   0.120    0.090    9.00   0.270     0.130   0.170   0.180   0.000    0.190
   GH      0.150   0.750   0.475   5.500   0.680   0.080   0.440    0.660   14.56   0.510     0.440   0.220   1.585   0.000    0.500
```


Alaska
K
Pacific Northwest
W
California
C
Hawaii
H
Gulf
G
South Atlantic
S
North Atlantic
N
site breakdown
1 2 3
4 5 6
7 8 9
70°N
60°N
50°N
40°N
30°N
20°N
10°N
160°W
150°W
140°W
130°W
120°W
110°W
100°W
90°W
80°W
70°W
60°W
1975

Appendix Figure 1.—Map of Microconstituent Data Bank areas and site.



NOAA FORM 88T
(10–72)

DOC – NOAA – NMFS

FISH DATA LABEL

(Do not use ink; use a soft lead pencil)

DATE OF SAMPLING

COLLECTOR'S SAMPLE #

TISSUE

COMMON NAME

SCIENTIFIC NAME

YEAR CLASS

WEIGHT (specify #, oz, g)

SEX

DEPTH (f)

LENGTH (mm)

LOCATION (Long.)

(Lat.)

(Other)

BOAT

CAPTAIN

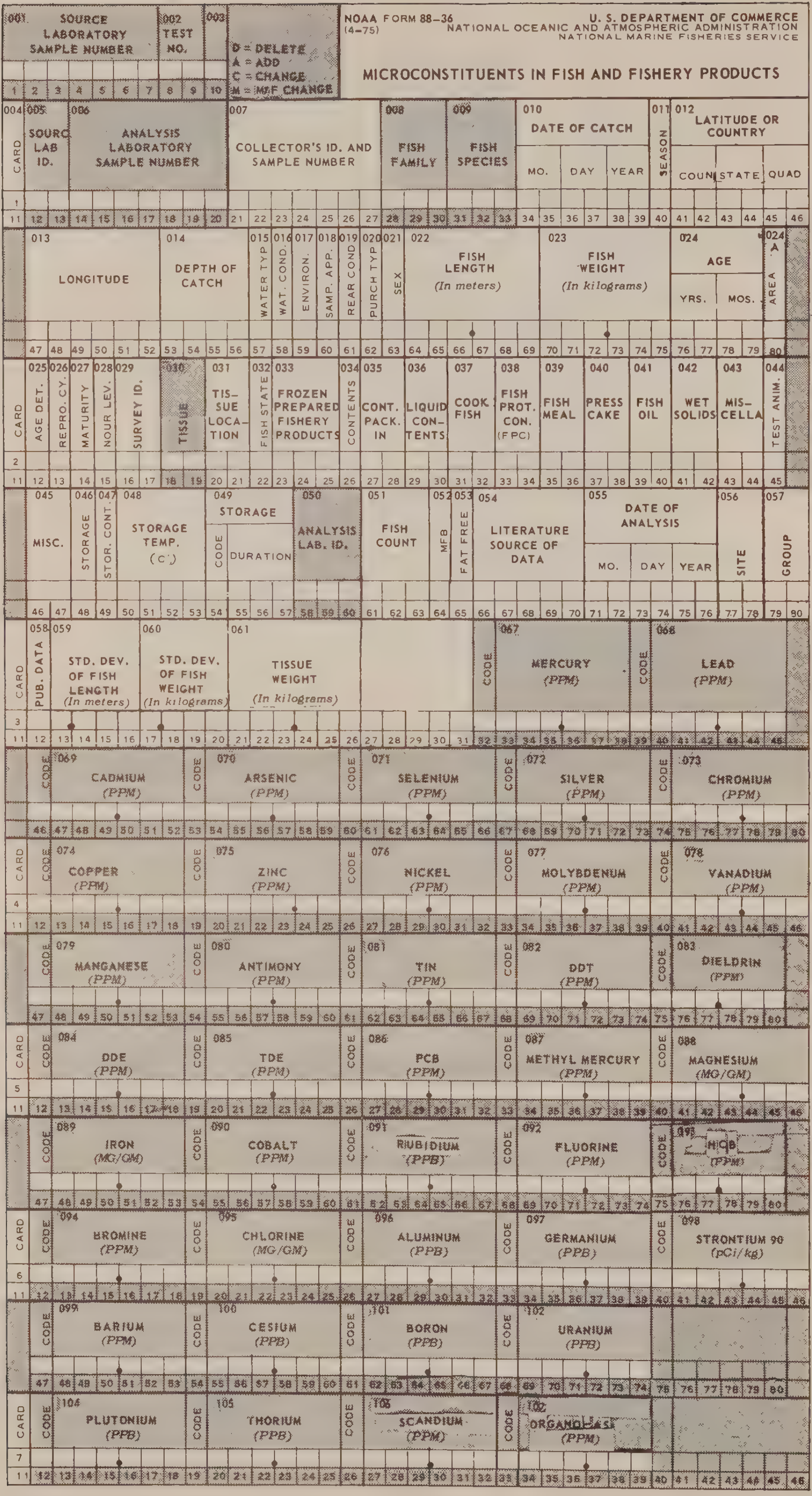
COLLECTOR

BUSINESS ADDRESS OF COLLECTOR

REMARKS

OTHER PERTINENT INFORMATION WILL BE WELCOMED.

Appendix Figure 2.—Fish data label.



NOAA FORM 88-36
(4-75)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

MICROCONSTITUENTS IN FISH AND FISHERY PRODUCTS

001 SOURCE LABORATORY SAMPLE NUMBER
002 TEST NO.
003
D = DELETE
A = ADD
C = CHANGE
M = M/F CHANGE
1 2 3 4 5 6 7 8 9 10

CARD 1
004 CARD
005 SOURC LAB ID.
006 ANALYSIS LABORATORY SAMPLE NUMBER
007 COLLECTOR'S ID. AND SAMPLE NUMBER
008 FISH FAMILY
009 FISH SPECIES
010 DATE OF CATCH — MO. — DAY — YEAR
011 SEASON
012 LATITUDE OR COUNTRY — COUN — STATE — QUAD
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46

013 LONGITUDE
014 DEPTH OF CATCH
015 WATER TYP
016 WAT. COND.
017 ENVIRON.
018 SAMP. APP.
019 REAR COND
020 PURCH TYP
021 SEX
022 FISH LENGTH (In meters)
023 FISH WEIGHT (In kilograms)
024 AGE — YRS. — MOS.
024A AREA
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

CARD 2
025 AGE DET.
026 REPRO. CY.
027 MATURITY
028 NOUR LEV.
029 SURVEY ID.
030 TISSUE
031 TISSUE LOCATION
032 FISH STATE
033 FROZEN PREPARED FISHERY PRODUCTS
034 CONTENTS
035 CONT. PACK. IN
036 LIQUID CONTENTS
037 COOK FISH
038 FISH PROT. CON. (FPC)
039 FISH MEAL
040 PRESS CAKE
041 FISH OIL
042 WET SOLIDS
043 MISCELLA
044 TEST ANIM.
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

045 MISC.
046 STORAGE
047 STOR. CONT.
048 STORAGE TEMP. (C°)
049 STORAGE — CODE — DURATION
050 ANALYSIS LAB. ID.
051 FISH COUNT
052 MFB
053 FAT FREE
054 LITERATURE SOURCE OF DATA
055 DATE OF ANALYSIS — MO. — DAY — YEAR
056 SITE
057 GROUP
46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

CARD 3
058 PUB. DATA
059 STD. DEV. OF FISH LENGTH (In meters)
060 STD. DEV. OF FISH WEIGHT (In kilograms)
061 TISSUE WEIGHT (In kilograms)
CODE — 067 MERCURY (PPM)
CODE — 068 LEAD (PPM)
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

CODE — 069 CADMIUM (PPM)
CODE — 070 ARSENIC (PPM)
CODE — 071 SELENIUM (PPM)
CODE — 072 SILVER (PPM)
CODE — 073 CHROMIUM (PPM)
46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

CARD 4
CODE — 074 COPPER (PPM)
CODE — 075 ZINC (PPM)
CODE — 076 NICKEL (PPM)
CODE — 077 MOLYBDENUM (PPM)
CODE — 078 VANADIUM (PPM)
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46

CODE — 079 MANGANESE (PPM)
CODE — 080 ANTIMONY (PPM)
CODE — 081 TIN (PPM)
CODE — 082 DDT (PPM)
CODE — 083 DIELDRIN (PPM)
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

CARD 5
CODE — 084 DDE (PPM)
CODE — 085 TDE (PPM)
CODE — 086 PCB (PPM)
CODE — 087 METHYL MERCURY (PPM)
CODE — 088 MAGNESIUM (MG/GM)
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46

CODE — 089 IRON (MG/GM)
CODE — 090 COBALT (PPM)
CODE — 091 RUBIDIUM (PPB)
CODE — 092 FLUORINE (PPM)
CODE — 093 HCB (PPM)
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

CARD 6
CODE — 094 BROMINE (PPM)
CODE — 095 CHLORINE (MG/GM)
CODE — 096 ALUMINUM (PPB)
CODE — 097 GERMANIUM (PPB)
CODE — 098 STRONTIUM 90 (pCi/kg)
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46

CODE — 099 BARIUM (PPM)
CODE — 100 CESIUM (PPB)
CODE — 101 BORON (PPB)
CODE — 102 URANIUM (PPB)
47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

CARD 7
CODE — 104 PLUTONIUM (PPB)
CODE — 105 THORIUM (PPB)
CODE — 106 SCANDIUM (PPM)
CODE — 107 ORGANO[illegible] (PPM)
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46

NOAA FORM 88-36 (4-75)

Appendix Figure 3.—Coding Form NOAA 88-36.

Appendix Table 1.—National Marine Fisheries Services' laboratories and agents supplying and preparing samples for the Resource Survey.

Laboratories responsible for collection and preparation:	
SEFC	College Park, Md.
NWAFC	Seattle, Wash.
Laboratories responsible for and assisting in collection:	
NEFC	Woods Holde, Mass.
NEFC	Gloucester, Mass.
NEFC	Narragansett, R.I.
NEFC	Milford, Conn.
NEFC	Sandy Hook, N.J.
NEFC	Oxford, Md.
SEFC	Beaufort, N.C.
SEFC	Brunswick, Ga.
SEFC	Miami, Fla.
SEFC	St. Petersburg, Fla.
SEFC	Panama City, Fla.
SEFC	Pascagoula, Miss.
SEFC	Galveston, Tex.
SEFC	Port Aransas, Tex.
SWFC	LaJolla, Calif.
SWFC	Tiberon, Calif.
SWFC	Honolulu, Hawaii
NWAFC	Seattle, Wash.
NWAFC	Auke Bay, Alas.

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